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Textile World

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International Federation's Cotton Statistics

Marked Decrease in Foreign Consumption for Both Year and Half Year and Particularly in Use of American Cotton —Show World Mill Stocks Smaller Than Those of Other Authorities—Statistics Represent Actual Figures for About 90 Per Cent. of World Spindles and Estimates for Balance

THE depressed condition of cotton manufacturing in foreign countries, particularly during the last six months of the cotton season of 1922-23, due to the high price of cotton and the low purchasing power of foreign consumers, is emphasized by the official cotton statistics for the season of the International Federation of Master Cotton Spinners' and Manufacturers' Associations. Scarcely less important is their confirmation of a reported decrease in consumption of American cotton by foreign spinners and increased use of foreign cotton. Increase in total world consumption is due wholly to the marked increase in consumption in this country, the world total for the season of 1923 being 22,076,000 running bales as compared with 21,162,000 bales in 1922.

The Shrinkage in Mill Stocks

The total stocks of spinners on July 31, 1923, are estimated by the International Federation at 3,872,000 running bales. It is somewhat interesting to note, while stocks in this country decreased only 137,000 running bales, foreign mill stocks shrank a little more than 1,000,000 running bales, fully two-thirds of the latter shrinkage involving stocks of American cotton.

Comparisons Rendered Difficult

Comparisons of International Federation figures with those of our Department of Commerce and other authorities is rendered difficult by the fact that the former are compiled upon the basis of actual, or running, bales, whereas the figures of the Department of Commerce and most other statisticians are compiled upon the basis of bales of 500 pounds. The International Federation's figures for last season for both consumption and stocks are based upon official reports from a little more than 90 per cent. of the world's spindleage and upon estimates for unreported spindleage. The International Federation makes no attempt to compile statistics of the visible supply of cotton but accepts the statistics of "Cotton", the official organ of the Liverpool Cotton Association. World stocks thus compiled on July 31, 1923, aggregated 5,359,000 running bales as compared with 7,745,000 running bales at the same time in 1922.

Features of the Report

Certain features of the report are explained by Arno S. Pearse, general secretary of the International Federation, as follows::

No returns have been received from Germany and Brazil. For Germany the figures for the last half-yearly census have been used, less 25 per cent. for consumption and mill stocks, due to the economic conditions obtaining in that country during the last half year.

The Consumption Table shows that the world's consumption of American cotton during the second half year of the cotton season ended July 31, 1923, has been 614,000 bales less than in the first half year and this falling-off is entirely due to Europe.

Great Britain has used over a quarter of a million bales less of American cotton during the second half year than during the first and her consumption of this cotton during the last season is below 2,000,000 bales, or a third of U. S. A.'s consumption, in spite of the latter country having only a little more than half the number of spindles of Great Britain. France, Germany and Italy together consume more American cotton than Great Britain, and Great Britain's consumption of all kinds of cotton represents barely more than one-third of Europe's total consumption. In 1913, Great Britain consumed 3,500,000 bales of American cotton.

France is the only important country in Europe which has increased cotton consumption during the second half year as against the first. In Asia, India and China have consumed less, Japan a trifle more; in America, the U. S. A. have added to their consumption figure.

The total world's consumption of all kinds of cotton for the second half of the season is nearly 700,000 bales less than in the first, though for the 1922-23 season the world's cotton in-

Calculated Total World's Cotton Mill Consumption for the Cotton Seasons 1923 and 1922 on Basis of Spinners' Returns Made to the International Cotton Federation

IN THOUSANDS OF ACTUAL BALES (Regardless of Weight)

Countries—	American				East Indian				Egyptian				Sundries				Total				
	Half Year Ending				Half Year Ending				Half Year Ending				Half Year Ending				Half Year Ending				
	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	
Europe—																					
(1) Great Britain	1,096	823	1,107	1,168	39	68	27	27	184	209	168	168	187	164	74	125	1,506	1,264	1,376	1,488	(1)
(2) France	400	390	349	450	74	96	41	78	46	47	29	45	31	95	15	28	551	628	434	601	(2)
(3) Germany	448	336	442	469	126	94	109	110	21	16	21	20	12	9	11	10	607	455	583	609	(3)
(4) Russia	61	61	3	24	..	..	..	..	1	1	3	4	234	151	366	229	296	213	372	257	(4)
(5) Italy	327	274	264	309	108	131	101	99	20	24	8	14	5	4	2	3	460	433	375	425	(5)
(6) Czecho-Slovakia	91	87	167	142	20	41	27	23	2	6	5	4	3	4	2	4	116	138	201	173	(6)
(7) Spain	155	94	114	180	37	28	16	30	16	17	4	15	2	2	3	..	210	141	137	225	(7)
(8) Belgium	67	62	67	69	59	68	51	49	2	2	2	2	5	7	2	1	133	139	122	121	(8)
(9) Switzerland	21	26	26	29	3	4	3	3	14	16	13	13	..	1	1	..	48	47	43	45	(9)
(10) Poland	93	74	82	88	20	24	18	19	4	3	1	3	8	2	2	7	125	103	103	117	(10)
(11) Austria	34	27	45	41	18	23	13	12	1	2	1	1	..	1	1	..	53	53	60	54	(11)
(12) Holland	43	38	43	43	12	13	12	12	..	..	..	..	..	1	..	..	55	52	55	55	(12)
(13) Sweden	42	36	37	37	2	2	1	1	1	1	..	..	..	..	..	..	45	39	38	38	(13)
(14) Portugal	21	25	16	21	..	..	..	..	1	2	1	1	13	24	19	11	35	51	36	33	(14)
(15) Finland	16	16	18	15	..	..	..	..	..	..	..	..	..	..	..	..	16	16	18	15	(15)
(16) Denmark	15	11	10	8	..	1	..	..	..	..	..	..	1	..	..	..	16	12	10	8	(16)
(17) Norway	4	3	3	4	..	..	..	..	..	..	..	..	..	..	..	..	4	3	3	4	(17)
Europe Total	2,944	2,383	2,793	3,097	518	593	419	463	313	346	256	290	501	465	498	418	4,276	3,787	3,966	4,268	
Asia—																					
(1) India	21	5	35	19	1,182	1,015	1,105	1,102	4	1	3	7	9	15	20	23	1,216	1,036	1,163	1,151	(1)
(2) Japan	393	330	365	431	845	877	695	785	14	17	12	14	31	69	40	30	1,283	1,293	1,112	1,260	(2)
(3) China	73	37	86	95	171	186	132	214	3	1	1	1	623	515	417	450	870	739	636	760	(3)
Asia Total	487	372	486	545	2,198	2,078	1,932	2,101	21	19	16	22	663	599	477	503	3,369	3,068	2,911	3,171	
America—																					
(1) U. S. A.	3,125	3,198	2,855	2,760	8	13	6	5	77	103	82	74	47	51	60	54	3,257	3,365	3,003	2,893	(1)
(2) Canada	92	83	73	83	..	..	..	..	..	2	1	..	..	..	..	..	92	85	74	83	(2)
(3) Mexico	11	9	39	11	..	..	..	..	..	..	..	..	62	54	25	57	73	63	64	68	(3)
(4) Brazil	..	..	..	..	..	..	..	..	..	..	..	..	275	280	227	250	275	280	227	250	(4)
America Total	3,228	3,290	2,967	2,854	8	13	6	5	77	105	83	74	384	385	312	361	3,697	3,793	3,368	3,294	
Sundries	3	3	..	10	..	1	..	..	7	8	7	..	32	32	21	146	42	44	28	156	
Half Year Totals	6,662	6,048	6,246	6,506	2,724	2,685	2,357	2,569	418	478	362	386	1,580	1,481	1,308	1,428	11,384	10,692	10,273	10,889	
Grand Total Cotton Season	12,710 1923		12,752 1922		5,409 1923		4,926 1922		896 1923		748 1922		3,061 1923		2,736 1922		22,076 1923		21,162 1922		

dustry has used 22,076,000 bales against 21,162,000 bales in the 1921-22 season, due to the heavier consumption during the first half year of 1922-23 season.

Greater Egyptian Consumption

It is worth noting that Egyptian is the only variety of cotton which shows a substantial increase of consumption during this half year; it will be seen that the consumption has steadily increased during the last four half years.

United States of America. The Bureau of the Census, Washington, D. C., supplies figures specially for us. It must be noted that the figures of foreign cotton generally published by the Bureau are in equivalent bales of 500 pounds, but in our tables of consumption and stocks of U. S. A. they are given in running or actual bales, i. e. in the the case of Egyptian cotton bales of about 750 pounds.

Falling Off in Stocks

The Stock Table shows a most decided falling-off in stocks held by the mills of American cotton. This shortage of mill stocks accounts to a great extent for the abnormal demand that has sprung up during the last few weeks for American cotton to be delivered in the early months. There is a shrinkage in all the different kinds of cotton stocks, except Egyptian. The reduction in the world's stocks on Aug. 1, 1923, was 600,000 bales as against Aug. 1, 1922.

Hester's Estimate

Col. Hester of the New Orleans Cotton Exchange, estimated European mill stocks of American cotton to be 520,000 bales, while our tabulation shows 494,000 bales.

OPINIONS ON BUSINESS

"Direct surveys of the business situation indicate that trade is more active than is generally supposed, and that substantial improvement is daily taking place in many of the important industries."—*The American Exchange National Bank, New York.*

"A feeling of conservatism marks the business situation in the United States at the present time, yet the buying of goods is large and steady, prices for the most part are well maintained, and production continues on an active scale. The underlying base for a continuation of good business is still firm, and one favorable aspect contributing to insure continued activity of production is the absence of any undue accumulations of unsold goods on sellers' shelves."

—The Mechanics and Metals National Bank, New York.

"The credit men of the country report improved business in August as compared with a year ago, and they look for better business for September, October and November of 1923 as compared with the same months of 1922."

—National Association of Credit Men.

"All important retail stores departments with the exception of neckwear, veilings, notions and art needlework, reported sales gains for August over the same month last year."

—National Retail Dry Goods Association.

Artificial Silk in Canada

Establishment of Plant Encouraged by New Duty

(From our Regular Correspondent)

TORONTO, CAN.—The outstanding feature of the Canadian textile situation last year was said to be a constant and insistent demand throughout for artificial silk. More interest was exhibited in this commodity than in any other class of goods. The growing demand for artificial silk, the many new uses to which it is being made applicable, and the present prosperity of the industry, make the time specially propitious for considering the feasibility of establishing an artificial silk plant in Canada. The Government recently made a move of encouragement when in the budget it placed this commodity on the dutiable list.

Under the new tariff, importations of artificial silk yarns or fibre silk yarns, not more advanced than singles, are subject to a preferential tariff of 10%, an intermediate of 12½%, and a general of 15%. Yarns in the form of threads or twists are subject to British, intermediate and general tariffs of 17½%, 22½% and 25%, respectively. Artificial silk fabrics are subject to duties of 17½%, 27½% and 30%, respectively; and manufacturers of artificial silk to duties of 30%, 35% and 37½%, respectively.

Opportunity for Canadian Product

There is undoubtedly every opportunity existing for the location of an artificial silk plant in Canada, and recent movements have merely added to these inducements. In addition to the duty imposed on the importations of artificial silk, the anticipated pulpwood embargo is bound to have an indirect effect on the industry and be a further encouragement for Canadian establishment. Not only does the Canadian domestic market demand such an establishment, but there exist opportunities for developing an export trade with Canada's far-flung markets. Even the United States, at the present time, is unable to furnish all her own requirements in artificial silk, and is under the necessity of making certain importations.

The logical location for an artificial silk plant in Canada would appear to be either in Ontario or Quebec, where most of the textile plants, including those using imported artificial silk threads, are situated.

Asks Government Aid

The Silk Association of America, by authority of its Executive Committee, has sent a cable to the Minister of Agriculture and Commerce and Foreign Affairs in Tokyo, urging Government assistance to the Japanese silk industry. Local rivalries in Japan, it has been reported, are helping to delay the resumption of trading. The cable reads:

"American silk industry anxiously awaiting resumption of silk shipments from any Japanese port and especially the establishment of an active market and stable prices. We regret to receive reports that delay is caused by conflict of local interests. We advise that assistance be given by governmental agency."

Silk Fund Contributions

The Silk Association fund for Japanese relief amounts to $411,151.66. Those whose contributions have been received recently are:

Schwarzenbach, Huber & Co. employes (Altoona and Juniata)	$446.30
Watson Machine Co.	250.00
F. Q. Hartman	200.00
R. Brupbacher	25.00
Charles Steiner	15.00

Calculated Total World's Cotton Mill Stock for the Cotton Seasons 1923 and 1922 on Basis of Spinners' Returns Made to the International Cotton Federation

IN THOUSANDS OF ACTUAL BALES (Regardless of Weight)

Countries—	American				East Indian				Egyptian				Sundries				Total				
	Half Year Ending				Half Year Ending				Half Year Ending				Half Year Ending				Half Year Ending				
	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	Jan 31 1923	July 31 1923	Jan 31 1922	July 31 1922	
Europe—																					
(1) Great Britain	152	104	200	183	14	29	8	14	63	69	60	71	40	35	36	43	269	237	304	311	(1)
(2) France	116	88	109	124	30	50	20	49	26	23	16	23	17	11	7	17	189	172	152	213	(2)
(3) Germany	75	54	143	130	33	24	43	53	8	6	10	8	6	5	5	5	122	89	201	196	(3)
(4) Russia	13	26	3	18	..	..	..	..	1	5	2	1	70	42	70	193	84	73	75	212	(4)
(5) Italy	120	90	126	119	45	57	52	50	12	12	7	8	2	2	2	2	179	161	187	179	(5)
(6) Czecho-Slovakia	25	18	40	42	6	10	11	10	1	2	3	2	1	1	1	2	33	31	55	56	(6)
(7) Spain	27	32	15	118	4	3	1	16	8	1	2	10	..	1	..	2	39	37	18	146	(7)
(8) Belgium	27	17	26	21	19	28	26	22	1	1	1	1	1	3	1	1	48	49	54	45	(8)
(9) Switzerland	14	11	21	14	2	3	2	2	11	11	10	10	1	1	1	1	28	26	34	27	(9)
(10) Poland	14	12	9	14	6	6	8	9	1	2	1	2	1	1	1	3	22	21	19	28	(10)
(11) Austria	10	7	11	14	5	11	6	6	..	1	1	1	1	..	..	..	16	19	18	21	(11)
(12) Holland	15	10	10	16	4	8	6	10	..	..	..	..	..	..	..	..	19	18	16	26	(12)
(13) Sweden	14	11	18	11	1	2	1	1	..	1	..	..	..	..	..	..	15	14	19	12	(13)
(14) Portugal	5	6	4	6	..	..	..	..	..	..	..	..	4	6	6	3	9	12	10	9	(14)
(15) Finland	6	2	3	4	..	..	..	..	..	..	..	..	..	..	..	..	6	2	3	4	(15)
(16) Denmark	3	3	1	3	..	..	..	..	..	..	..	..	..	..	..	..	3	3	1	3	(16)
(17) Norway	1	1	1	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	(17)
Europe Total	637	492	740	838	169	231	184	242	132	134	113	137	144	108	130	272	1,082	965	1,167	1,489	
Asia—																					
(1) India	14	5	21	19	595	717	764	882	4	1	7	11	2	10	26	18	615	733	818	930	(1)
(2) Japan	167	160	316	307	378	570	459	565	22	21	18	19	35	30	13	13	602	781	806	904	(2)
(3) China	25	20	53	55	64	88	48	110	..	..	2	1	267	103	217	149	356	211	320	315	(3)
Asia Total	206	185	390	381	1,037	1,375	1,271	1,557	26	22	27	31	304	143	256	180	1,573	1,725	1,944	2,149	
America—																					
(1) U. S. A.	1,908	977	1,592	1,124	3	9	4	6	43	60	44	43	23	24	31	34	1,977	1,070	1,671	1,207	(1)
(2) Canada	46	24	36	27	..	..	..	..	..	1	1	..	..	..	..	..	46	25	37	27	(2)
(3) Mexico	4	8	10	4	..	..	..	..	..	1	..	..	40	22	24	32	44	31	34	36	(3)
(4) Brazil	..	..	..	..	..	..	..	..	..	..	..	..	105	25	156	146	105	25	156	146	(4)
America Total	1,958	1,009	1,638	1,155	3	9	4	6	43	62	45	43	168	71	211	212	2,172	1,151	1,898	1,416	
Sundries	3	3	..	1	..	..	..	..	3	3	9	..	18	25	5	13	24	31	14	14	
HALF YEAR TOTALS	2,804	1,689	2,768	2,375	1,209	1,615	1,459	1,805	204	221	194	211	634	347	602	677	4,851	3,872	5,023	5,068	

Editors
Charles H. Clark Vernon E. Carroll
Clarence Hutton Douglas G. Woolf

EDITORIAL

We Believe in the Conservation and Protection of Domestic Industries

Ginghams Again

"WHETHER a full mill production of ginghams can be sold at these prevailing prices for spring, in view of the stocks that exist throughout the country, is a question which is puzzling everyone." This excerpt from the latest market service letter of the National Wholesale Dry Goods Association brushes aside all the subsidiary angles of the gingham situation and summarizes a problem which has caused more discussion in the cotton goods market than any of recent years. To many jobbers the problem appears as one of production only, with the remedy most simple and apparent.

Practically no intelligent complaints have been made regarding the new prices recently made by mills on spring ginghams. From the standpoint of mill costs most buyers are willing to admit that unchanged prices from those quoted for fall by the large eastern manufacturers are amply justified. That the buyer was warranted in anticipating a reduction on ginghams for next spring after the policy was adopted by the leading company of shipping goods on memorandum from August 15 and can hardly be disputed, but the radical advance in cotton changed the situation almost overnight. The consequent embarrassment to jobbers who quoted their goods in expectation of a considerable reduction in mill prices is unfortunate, but it is one of the dangerous possibilities always present when anticipation of a rapidly fluctuating market is attempted.

Reports agree that considering the market as a whole spring ginghams are likely to develop slowly. Considerable improvement is reported in retail sales since late summer in many sections of the country; a large eastern jobber reports receiving more business on ginghams during September than he booked during the three previous months. Jobbers are bending every effort to clean up their stocks, and in instances are quoting lower prices than those at which they can buy from first hands. There are still many pessimists, but constant driving cannot fail to produce results.

Old timers point out that ginghams have always recovered from periods of depression, and will not fail to do so again. Their utility and relative cheapness have never been forgotten for long by the consumer. The man with 25 years or more dry goods experience philosophically regards ups and downs a necessary evil for which there is no remedy.

But is this not an unnecessarily fatalistic attitude? Extremely capable styling, coupled with modern merchandising methods, is understood to have lifted at least one brand of spring ginghams out of the rut of the general run of merchandise. For this one line, at least, matters of price and terms have become practically secondary considerations. Fresh designs and aggressive selling policies are said to have placed it almost in a class by itself.

It may very well be that what dress ginghams as a class need more than anything else is more general departure from the conservative styling and merchandising methods which have been good enough in the past but which do not seem to suffice today.

* * *

Carpet Auction as Barometer

AT this writing the progress of the Smith rug and carpet auction has been eminently satisfactory from the distributive standpoint. Not only has the attendance of buyers from all sections of the country been large, but the interest has been sustained. The very fact that larger operators have not taken sizable quantities is evidence that distribution has been wide and not confined to a few concerns or a few markets. Ability to dispose of offerings in small quantities showed general desire for merchandise and helped to sustain prices which showed a tendency to fall off where large lots were offered.

Auction prices do not make the selling prices of competitors but the spirit of any trade sale of this magnitude has its bearing upon the naming of market quotations. Had the sale progressed in a languid, desultory way it would have been regarded by carpet manufacturers generally as a sign that buyers were not in position to take a normal amount of merchandise and steps would probably have been taken to insure greater freedom of action. Conversely with a display of enthusiasm on the part of the buyers incentive is given for firmness in market quotations and warrant for believing in a successful season. The weakness shown in certain qualities, such as the better grades of Axminsters, does not necessarily have any bearing upon the price lists that have been or will be issued. The tendency of open market prices will be dependent upon the rise or fall of production costs, though as stated above, the ability of buyers to absorb the auction offerings will doubtless prove a salutary influence in the naming of prices.

* * *

Standardized Cotton Statistics

NOW that world standards for American cotton grades have been agreed to by organizations representing foreign cotton spinners and exchanges, we hope that the latter will recognize the desirability of standardized cotton statistics and bring friendly pressure to bear upon the International Federation of Master Cotton Spinners' and Manufacturers' Associations with that object in view. The latter's statistics of cotton consumption and mill stocks are accurately comparable neither with previous statistics of their own, nor with those of other organizations compiling similar data, like our Department of Commerce. The International Federation reports in actual or so-called running bales, whether they be Americans of 500 pounds, East Indias of 400 pounds or Egyptians of 750 pounds, while the Department of Commerce and most other authorities reduce their statistics to a comparable basis of 500 pounds.

This accounts in part for the radical difference between last season's statistics of world consumption and world mill stocks compiled by the International Federation and Department of Commerce, and a further variation is due to the fact that the International Federation is now adding to its figures estimates of consumption and stocks of non-reporting spinners, thus introducing a further element of non-comparability in its own statistics.

During previous seasons when the proportion of American and foreign cottons used by spinners of different countries varied only slightly from year to year, the approximate comparability of the International Federation's statistics were not questioned, but now that foreign use of American cottons is decreasing radically and their utilization of foreign growths is increasing, it must be apparent that the International Federation's statistics for consumption and mill stocks can be of little comparable value until a common denominator for bales or weights is adopted.

* * *

Clothiers' Credits

THE matter of collections and of buyers' credit are subjects that are uppermost in the minds of the men's wear selling trade at the moment. So many accounts are due the first of October that the attitude of the trade toward the payment of bills, or in fact the ability to pay these bills is worthy of decided consideration. It is with no desire to pose as an alarmist that we mention reports that in a good many cases buyers have not lived up to the terms of their contracts in the matter of payment and that it has been necessary in certain quarters to refuse further shipment of goods. It is also reported that among the delinquents are numbered a few decidedly important houses from the standpoint of size whose action has been rather unlooked for.

This delay on the part of clothiers to meet their indebtedness on schedule time is not necessarily a serious matter, though it is a signal for caution on the part of sellers in the primary market. It is felt that a period of cool, seasonable weather will do much to expedite the distribution of clothing from the wholesaler to the retailer and thence to the consuming public. In view of the buying capacity of the ultimate consumer, there is apparently little reason to be apprehensive over the eventual outcome, but at the same time the current situation demands the close scrutiny and careful attention of sellers of men's wear merchandise.

Greene-Springs Banquet

Complimentary Dinner Tendered to Principal Factors in Deals

A complimentary banquet was tendered Edwin Farnham Greene, treasurer of the Pacific Mills and head of Lockwood, Greene & Co., mill engineers and architects, and Col. Le Roy Springs, head of a chain of mills in South Carolina, recently sold to the above firm, on Wednesday evening, at Charlotte, N. C. About 200 guests representative of the textile industry were present. David Clark, of Charlotte, acted as toastmaster.

Mr. Greene in addressing the gathering stated that the principal reason for his company's acquisition of mill properties in the South was to gain the advantage of nearness to the sources of raw material and that the South offered so many advantages for cotton manufacturing. He spoke of the company's bleaching and finishing plant being erected in South Carolina and stated that later the corporation will enter the dyeing and printing field. Mention was also made by the speaker of the saving in freight.

Mr. Greene declared that no change in the local management of the mills purchased was contemplated because it was believed that the present organizations manned by southern officials were most competent to operate the southern plants. He paid a graceful tribute to the ability of southern mill operators, which he declared had been greatly developed during the last 20 years. He further pointed out the longer hours of work and lower wage scales as being among the advantages of the South as compared with New England, while the lower living costs allowed operatives to live as well, if not better, than similar mill workers in New England.

Col. Springs, after reviewing his career as a mill man, declared that he was retiring simply to enjoy a well-earned rest and not because of any lack of confidence in the southern manufacturing industry. Other speakers were W. S. Lee, president of the Southern Power Co. and W. H. Wood, president of the American Trust Co., Charlotte.

To Liquidate Alien Property

WASHINGTON, D. C.—William W. Wilson, general counsel, and George E. Williams, managing director of the Alien Property Custodian's office, have left for Europe to put into operation a plan for carrying out the provisions of the Winslow bill enacted March 4 last. These representatives also will take testimony in Europe in certain important cases in which suits have been filed against the Alien Property Custodian for claims disallowed under the law. These suits involve several millions of dollars held by the Custodian as well as questions of policy and interpretation of the law. Alien Property Custodian Miller stated. Under the policy already adopted the remaining alien property, amounting approximately to $300,000,000, will be liquidated.

Boston Convention of N. A. C. M.

Interesting Program Includes Several Innovations—Convention Linked Up with Textile Exhibition

THE tentative program for the convention of the National Association of Cotton Manufacturers, to be held at the Copley-Plaza Hotel, Boston, Oct. 31 and Nov. 1, shows that there will be closer co-operation than ever before with the Textile Exhibitors' Association and the show to be staged by the latter in Mechanics Hall, Boston, from Oct. 29 to Nov. 3, inclusive. Not only will the National Association have a booth (No. 140), where information regarding the work of the association will be exhibited, but in booths 44 and 45 on the main floor of Mechanics Building the organization's exhibition committee, headed by Harold C. Whitman, treasurer of the Esmond (R. I.) Mills, will stage an exhibit designed to show the history, development, and tendency of cotton manufacturing in New England. In addition, the Thursday morning session of the convention will be devoted to addresses and discussion on the development of cotton fabrics, their design, manufacture, and expansion thus linking up the convention with the association's exhibition. Synchronizing with these features will be a special exhibit arranged for members and guests of the organization at the Boston Art Museum, this exhibit including a display of Japanese batiks, Indian and Italian printed cottons, Indian tied and dyed work, and French and English copper-plate engravings on cotton.

Ladies Direct Entertainment

Another novel feature of the convention is involved in placing responsibility for all formal entertainment upon a committee made up entirely of ladies and headed by Mrs. Robert Amory, wife of the president of the association. It is understood that this committee will devote its efforts entirely to arrangements for the cabaret supper and dance to be held in the ballroom of the Copley-Plaza, Wednesday evening, Oct. 31. This is ladies' night and the committee in charge of the event especially request that ladies attending shall wear cotton dresses, although the gentlemen will be privileged to appear in formal evening dress. The entertainment committee is as follows: Mrs. Robert Amory, Chairman; Miss Dorothy Atwood, Mrs. Albert Farwell Bemis, Mrs. W. I. Bullard, Mrs. Morgan Butler, Mrs. Alfred E. Colby, Mrs. Philip Dana, Mrs. Arthur R. Dickinson, Mrs. A. W. Dimick, Mrs. B. H. Bristow Draper, Mrs. Albert Greene Duncan, Mrs. Nathan Durfee, Mrs. R. H. I. Goddard, Mrs. Edwin F. Greene, Mrs. Franklin W. Hobbs, Mrs. Charles M. Holmes, Mrs. Russell H. Leonard, Mrs. Russell B. Lowe, Mrs. Harry C. Meserve, Mrs. John Skinner, Mrs. W. Frank Shove, Mrs. John A. Sweetser and Mrs. Andrew S. Webb.

Revision of Constitution

In accordance with the resolution passed at the spring meeting in Providence last April, President Robert Amory appointed a committee consisting of Albert Greene Duncan, Chairman, Alfred E. Colby and John A. Sweetser to revise the constitution and by-laws and this committee will make its report at the coming convention. It is understood that one of the important changes involves the holding of the annual meeting in the fall instead of in the spring as heretofore.

Tentative Convention Program

In addition to the convention features previously mentioned it may be stated that the subject of the Wednesday afternoon session will be "Industrial Relations," and that Thursday afternoon will be devoted to the technical session, the program for which is being prepared by a committee consisting of Russell T. Fisher, Chairman, Harry L. Bailey and Albert R. Pierce. The committee on resolutions consists of S. Harold Greene, Chairman, C. F. Broughton, Frederic W. Howe and John Skinner. The tentative program is as follows:

First Session—Wednesday morning, 11 a. m.: Business Session; Address of President; Report of Secretary; Report of Treasurer; Reports of Committees.

Second Session—Wednesday afternoon, 2.30 p. m.: Business Session, Report of Committee on By-Laws; subject, "Industrial Relations."

Third Session—Wednesday evening, 7.30 p. m.: Ladies' Night, Cabaret-Supper and Dance.

Fourth Session—Thursday morning, 10 a. m.: Subject, "Development of Cotton Fabrics"; Design; Manufacture; Expansion.

Fifth Session—Thursday afternoon, 2.30 p. m.: Technical Session.

Sixth Session—Banquet of the Association.

President Robert Amory and Secretary Harry C. Meserve are co-operating closely with the organization's exhibition committee and the membership of the latter, as well as the scope of the exhibition, have been materially enlarged. The new members of the committee are as follows: Bertram H. Borden, president American Printing Co., New York; Henry B. Thompson, president, U. S. Finishing Co., New York; William E. Winchester, of Deering, Milliken & Co., New York, and Charles B. Chase, treasurer, Stevens Mfg. Co., Fall River, Mass. A committee on information that will have charge of the preparation of a booklet descriptive of the exhibit together with other publicity in connection with the same has been appointed by President Amory as follows: Russell B. Lowe, treasurer, Parkhill Mfg. Co., Fitchburg, Mass., Chairman; W. Irving Bullard, vice-president Merchants National Bank, Boston, and A. E. Colby, assistant treasurer Pacific Mills, Boston.

TEXTILE CALENDAR

Southern Textile Association, Annual Convention, Richmond Hotel, Augusta, Ga., Oct. 12 and 13, 1923.

Philadelphia Textile Manufacturers Association, Semi-Annual Dinner Meeting, Manufacturers Club, Philadelphia, Oct. 18, 1923.

Committee D-13, American Society for Testing Materials, Fall Meeting, Oct. 26 and 27, at Headquarters of Society in Philadelphia.

Ninth Textile Exhibition, Textile Exhibitors, Mechanics Building, Boston, Oct. 29-Nov. 3, 1923.

National Association of Cotton Manufacturers, Fall Meeting, Copley-Plaza Hotel, Boston, Oct. 31 and Nov. 1, 1923.

National Association of Woolen and Worsted Overseers, Fortieth Annual Meeting, Mechanics Building, Boston, Nov. 3, 1923.

Associated Knit Underwear Manufacturers of America, Fall Convention, Utica, N. Y., Nov. 14 and 15, 1923.

Second National Exposition of Power & Mechanical Engineering, Grand Central Palace, New York, Dec. 3-8, 1923.

American Association of Woolen & Worsted Manufacturers, Annual Meeting and Dinner, Waldorf-Astoria, New York, Dec. 6, 1923.

OBITUARY

Charles Watson Lamb

Charles Watson Lamb of Griffith & Lamb Department of Phoenix Silk Mfg. Co., selling through Greff & Co., died last Saturday after an operation for appendicitis at St. Vincent's Hospital, Staten Island. Mr. Lamb came to New York in 1892 and was employed by A. D. Juilliard & Co. as stock clerk and later as salesman for the product of the Standard Silk Co. sold through this house. In 1910 he resigned his connection with them to take a position as salesman for John N. Stearns & Co. About 1912 the department firm of O'Beirne & Lamb was organized with J. Kridel Sons & Co. Soon after the firm became known as O'Beirne, Lamb & Griffith and later Griffith & Lamb and conducted business subsequently with L. Erstein & Bro., Inc. January 1, 1922, they became associated as a department with the Phoenix Silk Mfg. Co., specializing on silk crepe. Mr. Lamb was in his 52nd year and is survived by his widow. Funeral services were held at his late residence Tuesday.

Successful Carpet Sale

Smith Auction Makes Good Prices and Draws Many Buyers

Unusually good attendance, spirited bidding and firm prices characterized the carpet and rug auction of the Alexander Smith & Sons Carpet Co. which opened on Monday of this week at the New York sales offices of the company. The total value of carpets and rugs offered in the sale was estimated in the neighborhood of $5,000,000. The results of the first few days indicated strength and confidence in the market. A noteworthy feature was the fact that retailers were present in large numbers and that sales were widely distributed, large lot buying being the exception despite the eagerness with which the offerings were taken up.

Prices realized were higher than those quoted in the price list issued to jobbers last spring but lower than the prices made to retailers in April. The absorbing power of distributors on such a price level as this was a surprise even to members of the trade who had been most optimistic as to the auction's success. The offering totaled about 80,000 bales.

As usual, Wilmerding, Morris & Mitchell were the auctioneers. The terms of the sale were as follows: 4% Jan. 1, 1924; anticipation permitted at 8% per annum; sellers reserve right of delivery to Oct. 31, 1923; goods sold F. O. B. mills.

The first lot in the sale which comprised Manor tapestry rugs, 9 x 12, was knocked down to J. M. Hale, who has been the recipient of the first lot in many previous auctions, for $18.50. The rest of the offering of this description on Monday brought from $16.50 to $17.50. In general the lower grades of rugs brought proportionately better support and made better prices, than the more expensive grades.

Prices made in the early part of the week on representative grades are as follows:

MANOR TAPESTRY RUGS

Seamless..	Auction prices	Retail list April, 1923
9 x 12	$10 50 a 13 50	$20 10
8.3 x 10.6	14 85 a 15 50	17 75
7.6 x 9	11 40 a 12 50	13 80
6 x 9	9 25 a 10 00	11 05

KATONAH VELVET RUGS

Seamless—		
9 x 12	$18 40 a 19 50	$21 60
8.3 x 10.6	15 75 a 17 25	19 10
7.6 x 9	12 25 a 12 75	14 80
6 x 9	9 50 a 10 50	11 90

ALPINE AXMINSTER RUGS

Seamless—		
9 x 12	$25 25 a 26 00	$30 30
8.3 x 10.6	22 00 a 23 00	26 75
7.6 x 9	14 50 a 17 75	20 80
6 x 9	14 10 a	16 70

ARDSLEY AXMINSTER RUGS

Seamless—		
9 x 12	$38 25 a 30 00	$34 80
8.3 x 10.6	25 00 a 25 75	26 75
7.6 x 9	15 50 a 16 25	19 15
6 x 9	15 50 a 16 25	19 15

PALISADE VELVET RUGS (FRINGED)

Seamless—		
9 x 12	$28 25 a 30 00	$33 90
8.3 x 10.6	23 90 a 25 25	29 90
7.6 x 9	17 75 a 19 25	23 30
6 x 9	13 75 a 15 75	18 65

COLONIAL VELVET RUGS

(Fringed)

Seamless—	Auction prices	Retail list April, 1923
9 x 12	$35 75 a 37 00	$45 30
8.3 x 10.6	31 75 a 35 50	39 95
7.6 x 9	24 00 a 25 75	31 15
6 x 9	17 60 a 20 00	24 90
4.6 x 6.8	11 25 a 11 50	....

MILL ENDS

By Jack Card

STARVATION AND NAKEDNESS

THIS has been a depressing week. It started with an efficiency engineer—an appropriate start, incidentally. In the course of a rather excellent sales talk—though why he should deliver one to us, we can't figure—he drew himself up to his full height and exclaimed dramatically: "Do you know that the average man is just one day ahead of starvation?"

That in itself was enough. But the very next day we read a report of an address by President Voiland of the National Association of Retail Clothiers, which quoted him as saying: "There were 62 suits of men's clothing sold last year to every 100 men, which means that should a series of sartorial misfortunes engulf American men over night, about one-half must either seek refuge within the boundaries of overalls, or retire beneath the friendly coverlet of the family bed."

The only bright spot in this specter of the average man dodging starvation and nakedness is that we, like the rest of us, will not admit we're an average man.

* * *

WHAT DOES IT ALL MEAN?

BUT there must be some worthwhile thought to be deduced from these startling disclosures. Mr. Voiland's idea is that the customer is undersold, and that the clothing industry is "lamentably weak in the promotion of consumer interest in apparel."

As an individual consumer, we resent this. We are consistently and systematically oversold. Whenever we go into a store for the purpose of shopping around, against the day when we hope to be able to buy a new suit, we walk out with a series of garments we don't want and can't afford. That is, unless our own wife happens to be with us. There's a constructive thought for the retailers. Start a campaign against women accompanying their husbands on such shopping tours. If necessary, make delicacy the issue. You can always oversell an unattached male.

As for lack of "consumer appeal," the only reason we keep buying clothes is that we can never get over the idea that, through some lucky purchase, we may look like the men in the clothing ads.

* * *

THE "SWALLOW-TAIL" BRIGADE

THE *Boston Transcript*, we regret to state, takes a frivolous view of this sixty-two hundredths of a suit menace. It points to the national reserve of evening clothes and points out that, in the event of a catastrophe, nothing worse might happen than a parade of ancient "swallow-tails" and an admixture of moth-balls and "gas" in the city streets. It describes the event, not as a menace, but as a rather picturesque possibility.

* * *

WHAT ABOUT OVERALLS?

BUT we are sure there is some deeper significance than this. Possibly Mr. Voiland hinted at it when he mentioned overalls. Isn't this great ammunition for our denim manufacturers?

Personally, we haven't had a pair of overalls since we left the mill. We've occasionally thought of their value when we were cleaning the furnace, or greasing the car, or working in the garden—but none of the overall ads recommended the garment for these purposes. They always show an Apollo-like workman entering the mill gate, pail in hand, smile on his face, beautifully bedecked with overalls.

But here's some real "consumer appeal." If an overall salesman drove home the fact that his product is the one form of insurance against nakedness, we couldn't resist him any more than we can any other insurance agent.

But first some action must be taken at Washington. Last year 206,667 pair of overalls were exported from the United States. In other words, 206,667 men were deprived of their inalienable right to life, liberty and the pursuit of modesty. Compared with the importance of a prohibitive embargo to conserve our reserve of overalls, such questions as conservation of forests and of water power seem picayune.

* * *

BETTER OFF ANYWAY

BUT to get back to our efficiency engineer and his starvation theory. At the time we made what seemed to us a very brilliant rejoinder. Quick as a flash, we replied: "Is that so?" But the next day we realized that we could have been even more scintillating. Along came material from the National Industrial Conference Board, advising us that, from the standpoint of "real" earnings, the American workingman is better off than ever before. We're sure our efficiency man didn't know that—because the article was for future release. What we're trying to figure out now is just how many hours to add to that day of grace. There were at least 200 different percentages in the Board's statement, and we're sure that by juggling these around, and adding and subtracting them in turn, we'll get the factor we're after. And then we're going to shoot that starvation idea full of holes.

All of which is purely altruistic, for we can't even be called a workingman. We used to think we were, but after comparing the Board's statement with our family budget for September, we realize that we're not in that class. Maybe that's what he meant by the average man—anyone below the rank of workingman.

* * *

WE'RE HERE TO STAY

WE'VE got a lot more vital statistics which we're digesting for the good of the industry. Watch this space closely!

Meanwhile we must say a word in answer to M'Cready Sykes, who rises to state in *Commerce and Finance* that the New York pressmen's strike, with the resulting curtailment of newspaper space, proved to the public that they could get along nicely, thank you, without editorials.

All of which was news to us. Not as an editorial writer, but as a man in the street, we want to object. We wandered through life for several days, afraid to express an opinion on any current event. If an election had occurred during that time, we'd have stayed away from the polls. And most of our friends made the same confession.

In fact, it was that experience which impelled us to revive this column. We shuddered to think of 32,499,324 spindles in the United States working without proper guidance. We're here to stay—unless we run out of statistics.

Carpet Men's Banquet

Plea by Manufacturer for Continuance of High Tariff Policy

George McNair, president of the Mohawk Carpet Mills, Inc., Amsterdam, N. Y., was one of the principal speakers at the semi-annual banquet of carpet and rug manufacturers held at the Waldorf-Astoria Wednesday night. Mr. McNair made a plea for the continuance of a high tariff and the exclusion of imported carpets and rugs. Among other speakers were Seymour L. Cromwell, president of the New York Stock Exchange and the Rev. Dr. Dwight Witherspoon Wylie, pastor of the Central Presbyterian Church.

The banquet, which was in honor of the visiting buyers at the carpet and rug auction, was presided over by Nelson S. Clark, vice-president of W. & J. Sloane, and Charles B. Fritz was toastmaster. About 1,200 were present. The dinner committee consisted of George Nicols, of George Nicols & Co., C. W. Poulson, of Charles W. Poulson Co., Inc., M. M. Davison, of the Firth Carpet Co., Victor G. Beuttell, of the Hodges Carpet Co. and William H. Ross, of Stephen Sanford & Sons.

Defeat Exemption Bill

The Powell Cotton and Textile Mill Exemption Bill, providing 5-year exemption from taxes for new mills locating in Alabama within the next two years, passed by the Senate of that state two weeks ago, was defeated by the House of Representatives by nearly three-fourths majority.

Denies Silk Profiteering

President Goldsmith Answers Charge of Hat Manufacturers

In a recent interview, the attention of James A. Goldsmith, president of the Silk Association of America, was called to a resolution recently passed by the National Association of Hat Manufacturers, Inc., alleging that "immediately following the recent Japanese disaster . . . certain manufacturers and dealers in silk hat bands and hat trimmings of silk publicly withdrew their prices, but privately solicited orders at an advance of from 10 to 25% over the prices prevailing before the earthquake." The resolution condemned what was termed "a profiteering attempt to commercialize a great catastrophe."

Mr. Goldsmith, when the hat manufacturers' action was called to his attention, stated that he felt that under ordinary circumstances, in view of the widespread knowledge as to the attitude of the silk industry in general, it would not have been necessary to make any denial of the charges. In view of the language used, however, and the injustice to the American silk industry, he briefly reviewed the attitude of the silk trade since the day of the catastrophe.

It was necessary to buy spot silk at very high prices, Mr. Goldsmith explained, in order to maintain even a moderate flow of merchandise from the mill. We have yet to learn of one American manufacturer who has in any way intimated that he would not deliver every order on his books, irrespective of the price he will be compelled to pay to substitute raw material.

The American silk industry, Mr. Goldsmith concluded, has endeavored to act in a calm and deliberate manner, showing every consideration for the buying public, making every attempt to avoid speculation and a runaway market, and it is intolerable in view of these facts that a national association should make public a charge so unwarranted, so little based upon fairness and consideration. Silk goods will, without any question, continue to sell for many months to come at considerable advances over the prices which prevailed a month ago. We consider it our duty to the buying public to impress these facts upon them.

Japanese Loan to Be Floated

It is understood that preliminary details have been completed for a $100,000,000 gold loan to Japan by a New York syndicate. It is intended to float the loan here in two series of bonds, one maturing in 20 years and the other in 40 years, both to be guaranteed by the Japanese Minister of Finance and indorsed by Ambassador Hirahara at Washington. The interest rate will be 5½%. The loan designed for reconstruction purposes will be handled by a joint Japanese-American purchasing board.

Exhibit Goods Made in Carolinas

Textiles Prominent in Third Annual Exposition—Fabrics, Yarn, Knit Goods and Accessories Shown

CHARLOTTE, N. C.

COTTON fabrics, yarns and hosiery from the mills of North and South Carolina, put on display by the mills, commission houses and department stores, contributed largely to the success of the third Made-in-Carolinas Exposition which opened here Sept. 24 and closes today. The 1923 showing of products manufactured in the Carolinas, ranging from yarns to automobiles, reflected great credit not only on the territory covered by the exposition but also on John L. Dabbs, president of the exposition, and other officials who worked for weeks to make the third show a success.

The exposition was well patronized and the exhibits attracted much interest and did a great deal to acquaint the people of the two Carolinas with the variety and extent of home industry. The exposition has grown in extent and importance each year. The exhibits were principally of textiles, textile machinery and accessories, although there were a large number of other exhibits.

The group displays by three department stores, consisting principally of Carolina-made fabrics, were an innovation at the third exposition. Sumter and Greenville, S. C., Wilmington, Valdese, Spindale, Burlington and Greensboro, N. C., also showed group displays of their products, including textiles.

Novel Features

Rosemary Mfg. Co. and Roanoke Mills Co., Roanoke Rapids, N. C., had two jacquard looms weaving Rosemary damask and two automatic looms weaving colored cotton flannels in operation in its space. Finished goods from these mills were also shown. Francis Patterson was in charge of this instructive exhibit, which attracted great attention.

American Yarn & Processing Co., Mt. Holly, N. C., introduced the novelty of a moving yarn exhibit. Cones of its mercerized gassed yarns were mounted on revolving cylinders which were covered with hose and half hose knitted from the yarns.

Among the commission houses which exhibited at the show in individual spaces were Cone Export & Commission Co., and Joshua L. Baily & Co., both showing samples of the fabrics they sell for Carolina mills. Both displays were elaborate and well arranged, brands of the fabrics being prominent and in most instances a variety of patterns of each brand being shown. Ridley Watts & Co., and several other selling agents also cooperated with mills in making displays, the selling agents' names being placed over booths for the information of merchants and jobbers who visited the exposition.

Fabric Exhibits

Brief descriptions of goods displayed by individual weaving mills and selling agents follow:

Chatham Mfg. Co., Elkin, N. C., blankets.

Locke Cotton Mills, Concord, N. C., "Roseglen" ginghams.

Pomona Mills, Greensboro, N. C., "Pomona" cloth.

Industrial Cotton Mills, Rock Hill, S. C., "Industrial" denims.

Holt Granite-Puritan Mills, Haw River, N. C., "Victory" zephyrs.

E. M. Holt Plaid Mills, Burlington, N. C., "Dorothy Perkins" ginghams, "Oneida" plaids and "Sunflower" dress goods.

Stonecutter Mills, Spindale, N. C., "Spindale" zephyrs.

Cleghorn Mills, Rutherford, N. C., "Cleghorn" ginghams.

The Horn Co., Spindale, N. C., woven and braided rag rugs.

Joshua L. Baily & Co., New York City, "Glendale" shirtings and drills, "Arkwright" osnaburgs, "Erwin" sheetings and denims, "Westtown" drills, "Chesnee" shirtings, "Roseglen" ginghams, "Glasgow" zephyrs, "Cortland" sheetings, "Coolcemee" coverts and ticking, "Saxon" sheetings, etc.

Cannon Mfg. Co., Kannapolis, N. C., terry, huck and turkish towels and bath mats.

Brogon Mills, Anderson, S. C., and Chadwick-Hoskins Co., Charlotte, N. C., "Ladlassie" cloth, "Louise" twill, and "Pineville" sheetings in the gray and after conversion.

Rosemary Mfg. Co., and Roanoke Mills, Roanoke Rapids, N. C., "Rosemary" Basco finish damask and outings and bleached flannels.

Judson Mills, Greenville, S. C., silk filled draperies, ratines, tissue ginghams, silk stripped shirtings, etc.

Southern Franklin Process Co., Greenville, S. C., yarns and fabrics dyed by the Franklin process.

Victor-Monaghan Co., Greenville, S. C., "Monaghan" crinkled bedspreads, "Seneca" tubing, twills, and a variety of dobby goods.

Dunean Mills, Greenville, S. C., "Peter Pan" ginghams, "Burton" tissue ginghams, cotton and silk mixture dress goods, sports goods, voiles, etc.

Highland Park Mfg. Co., Charlotte, N. C., "Spencer," "Jeannette," "Touraine" and "Domino" ginghams and "Seashore" chambray.

Cone Export & Commission Co., Greensboro, N. C., and New York City, "Blossom" and "Crown" dress ginghams; "Haynes," "Cliffside" and "Broad River" staple ginghams; "Rompaway," "Signal," "Sailor Boy," "Colfax" and "Eno" shirtings; "Admiration," "Colonial," "Summit" and "American Boy" chambrays; "Silver Moon" and "As-You-Like-It" bleached goods, "Revolution" canton and outing; "Mineola," "Royal Plume," "Fairfax" and "Radio" cotton flannels; "Salisbury" and "Proximity" tickings; "Proximity" indigo drills, shirtings and denims; "Proximity" khaki drills and twills; and "White Oak" indigo denims.

Gibson Mfg. Co., Concord, N. C., "Concord" zephyrs, "Gibson" knicker cloth and "Charnoca" cloth.

Weave Shop, Saluda, N. C., handwoven novelties.

A. Leon Capel, Troy, N. C., braided rag rugs.

Knit Goods Exhibits

Mills exhibiting hosiery and knitted goods included:

Keystone Finishing Mills, S. Y. W. Hosiery Co., May Hosiery Mills, Seller Hosiery Mills and Whitehead Hosiery Mills, all of Burlington, N. C.; Hoover Hosiery Co., Concord, N. C.; Brame Sweater Co., N. Wilksboro, N. C., Washington Mills, Mayodan, N. C., Martinat Hosiery Mills, Pauline Hosiery Mills, and Waldensian Hosiery Mills, all of Valdese, N. C.

Yarn Exhibits

The Elmore Co., Spinners Processing Co., and Spencer Mills of Spindale, N. C., American Yarn & Processing Co., Mt. Holly, N. C., and Lily Mill & Power Co., Shelby, N. C.

Allied Exhibits

The National Aniline & Chemical Co., and E. I. du Pont de Nemours & Co., through their Charlotte branches, both exhibited at the Carolina products show. The exhibit of the National Aniline & Chemical Co., demonstrated the methods used in matching shades and the application of dyes to raw stock, yarns and piece goods, a practically complete laboratory outfit and working models of machines being used. The du Pont exhibit consisted of fabrics made in Carolina mills dyed with du Pont dyes, a giant panelled cone being used to display the fabrics.

Other textile accessory exhibits included: Parks-Cramer Co., Charlotte, heating, sprinkling, power piping and humidifiers; Southern Bobbin and Spool Company, Greenville; Jordan Mfg. Co., Toecane, N. C., bobbins and spools; Carolina Brush Co., Charlotte, textile and domestic brushes; Mill Devices Co., Charlotte, hand machine to tie weaver's knot; Bahnson Company, Winston-Salem, humidifiers; J. E. Sirrine and Co., mill engineers; Charlotte Mfg. Co., card clothing and reeds; Norris Brothers, Greenville, mill supplies.

Waste Dealers' Meeting

At the regular quarterly meeting of the National Association of Waste Material Dealers, held at the Drake Hotel, Chicago, last week, amendment to the Constitution and By-Laws to provide for a board of directors, made up of 30 members, in addition to the president, was unanimously carried. The board will be increased, beginning with the annual meeting, in March, 1924. Chicago and vicinity was well represented at the meeting and members were present, also from various parts of the country. Twenty-nine applications for membership were favorably acted upon. The board of directors, being satisfied that all conditions necessary to the formation of a Southern Division had been met with, authorized the formation of such a division.

Cooperatives Financed

WASHINGTON, D. C. — The War Finance Corporation has approved the application of the South Carolina Cotton Growers Cooperative Association, Columbia, S. C., for an advance of $5,000,000 to finance the orderly marketing of cotton this season.

Wool Spinners' Successful Outing

Association Holds Third Annual Field Day—Golf and Baseball the Features

"A HUGE success" was the unanimous opinion of the 180 or more members and guests who participated in the third annual field day of the National Association of Worsted and Woolen Spinners, Monday of this week. The fine fall day also contributed its share to the success of the occasion while the grounds of the Whitemarsh Valley Country Club never appeared to better advantage. A large contingent was present from New England, while New York and the Passaic district also contributed largely to the attendance.

According to schedule, the Manufacturers' Club was the rendezvous in the morning, and a fleet of autos

Howland Bottomley Soaking the Old Pill for a Run

was there to convey the party to the grounds. The golf match was got under way promptly under the efficient direction of Walter D. Larzelere, chairman of this committee, and the morning was largely given over to this sport. A large field participated.

After luncheon, which was served at the club house, the members were free to follow their own inclinations. Many were unable to resist another try at the difficult course, so that friendly golf matches were soon un-

Left to Right—Jim Ackroyd, Egan Quittner, Geo. W. Kritler, Fritz Quittner

der way. In the meantime, Charles T. Hoy, as manager and captain of the Boston baseball team, was busily engaged trying to round up his players. It was some job, but he finally succeeded in collecting his team with a few extras who pressed themselves into service. John T. Hosey, captain of the Philadelphia team, was all ready for the fray, so that eventually the battle was on.

The Ball Game

As is the rule governing these games, the ball used is the playground or indoor baseball type, so that the efforts of the players to "knock it a mile" caused considerable merriment among the crowd of rooters cheering their respective teams. So great was the desire to take part that before the end of the game, the infield looked

Left to Right—Joe Grear, Addressing Ball; L. Lohmeyer, W. D. Larzelere, Hollis Wolstenholme

something like a cricket field, with even an assistant catcher or two to help out in the slips, or rather, behind the bat. This caused the official scorer, Chas. S. Boyer, many hectic moments in keeping the batting order straight as the number of volunteers was in excess of the requirements. The full nine innings were played, and when the smoke was cleared away Scorer Boyer succeeded in making a result on his records, when it was found the Philadelphia team had won by the score of 10 to 8. The Boston team put up a game uphill battle, and as "Bill" Hunter said, "If we'd 'ad two or three more innings, we would have licked 'em." In fact they gave their opponents a good scare in the ninth.

Arthur B. Otto, Winner President's Cup

Dinner at Club House

The climax to the day's celebration was of course the dinner which was served in the clubhouse. The room was attractively decorated with flowers and autumn leaves, while an orchestra provided plenty of music for the songs. After the completion of a satisfactory menu, President H. L.

Roy Pitkin, Chas. J. Webb, Chas. Doak, Thos. H. Ball

Pitkin welcomed the members and their guests, and expressed the thanks of the association to Ernest R. Townson, chairman of the committee of arrangements, Walter D. Larzelere, chairman of the golf committee, and William H. Richardson, whose efforts had contributed so much to the success of the occasion. He then presented Chas. J. Webb as master of ceremonies. Mr. Webb assumed his duties with his usual facility, and with his rapid fire of witty comments kept things moving. His presentation of the various prizes offered as usual aroused much merriment, in his persistence in demanding each winner make a speech.

Prizes Awarded

The following prizes were awarded: President's Cup, Arthur B. Otto,

John Greaves, C. A. Foster, Harry Lonsdale, Chas. F. Havey

with gross 82-handicap 4, net 78. Comment was made to the effect that Mr. Otto's club handicap is ordinarily 10, but he voluntarily imposed the low figure upon himself; therefore his victory was well deserved. First prize for the low gross score was awarded Wm. J. Platt, with 86, golf-bag; 2nd prize, low net score, Thos. Andrews, 77, golf bag; 3rd prize, second low gross, brassie, a tie between Egan Quittner and Thos. Byrne, at 96. The toss-up showed Mr. Byrne the winner; 4th prize second low net, brassie, George W. Kritler, 97-18-79; 5th prize, Kicker's handicap net,

Dinner at Outing of National Association of Worsted and Woolen Spinners

driver, W. D. Larzelere, 81; 6th prize, kickers' handicap gross, driver, E. B. Murphy, 72 net; 7th prize,

This Is the Ninth Hole. Mr. Webb Made the Green and Holed Out for a Two. Ernest R. Townson and Thos. H. Ball in Background

presidential foursome, H. L. Pitkin, 98 net, golf bag; 8th prize, best form shown, Edward Legge, 1 doz. golf

Wm. L. Hunter Trying to Make Base

balls; 9th prize, player with worst form, John J. Hosey, steel brassie; 10th prize, player who lost the most

Jim Ackroyd Approaching

balls, Wm. H. Richardson, ball marker; player who talked too much, Chas. J. Webb, Niblick.

The base-ball score:

Philadelphia	Boston
Pitkin, 1st b.	Lister, c.
J. Hosey, 2nd b.	Lawton, p.
Chambers, ss.	Hunter, 1st b.
Halford, 3rd b.	Fougeray, 2nd b.
J. Bowles, lf. and c.	Waterhouse, 3rd b.
Harrison, cf.	Thomas, ss.
Stewart, rf.	Fitch, lf.
A. Lichtenstein, p.	Herne, cf.
Richardson, c., lf.	Hoy, rf.
Lehman, ss.	King, ss.
H. Bottomley, rf.	W. Hosey, c.
	Rockwell, lf.
	Hathaway, rf.
	Benrath, cf.

Boston .....0-0-1-1-1-1-0-4— 8
Philadelphia ....4-1-1-0-2-1-1-x—10

Reject Representation Plan

The proposed plan of employe representation for the Amoskeag Mfg. Co. has been rejected by vote of the employes. The cotton and worsted departments voted against it overwhelmingly while the mechanical department was almost unanimously in favor of it.

Georgia Cotton Manufacturers Meet

Association Hears Discussion of Taxes, Boll Weevil, Compensation Insurance, Industrial Relations, Etc.

ATLANTA, GA.

THE Cotton Manufacturers' Association of Georgia held a special meeting in Atlanta at the Piedmont Hotel, Tuesday, Oct. 2, with members of the association present from all parts of the state. Of the 140 textile mills in Georgia 103 are now members of the association.

The meeting was devoted largely to a general discussion of various problems of importance affecting the textile industries of the state, including taxation, the boll weevil, compensation insurance, social work among mill employes, and the business outlook for the industry the next few months.

A director was also elected at the meeting to succeed C. H. Williamson, of the Bibb Mfg. Co., of Macon, Ga., who died recently, H. W. Pittman, factory superintendent of the same company, being named to membership of the board.

The members present without exception agreed that the outlook for the textile industries of Georgia and the Southeast the next few months is exceptionally good, especially so as compared with the rather dull business that has been experienced through the summer months. Volume began to pick up early in September, and by the latter part of the month had reached the best point at any time this year, with every promise that there will be continued good business for the industry through the rest of the year and well into 1924. All mills in Georgia are now in operation.

Georgia's Tax Problem

One of the most important addresses of the meeting was by Colonel H. H. Swift, of Columbus, Ga., who spoke on "Georgia's Tax Problem."

So far as the textile industries are concerned the tax problem in Georgia is a serious one at this time, due to the fact that there is a 5 mill limit to state taxation, and no limit whatever to county or local taxation. This served to materially reduce the gross state revenue from taxes, but to increase county and local revenue from the same source, with the result that additional taxes will have to be passed by the state to maintain the level of revenue that is required. Colonel Swift stated that the present method will have to be remedied because industry is too greatly burdened under such a system. He emphasized the importance of the proposed income tax in Georgia, which will probably be given serious consideration by the special session of the state legislature later this year, advocating a flat rate per centage on incomes with deductions for the state ad valorem tax. It cannot be said, however, that the textile industries of the state are very heartily in favor of an income tax.

The Boll Weevil

Another important address was by W. G. Nichols, vice-president of the Griffin (Ga.) Co., who discussed at some length the boll weevil problem, and what the association can do to aid in the eradicaton of the pest. He advocated the associaton supporting what is known as the Florida plan, by which intensive poison methods are used early in the growing season, and which has proved a highly satisfactory method of successfully combating the ravages of the insect.

Industrial Relations

D. W. Anderson, manager of the Pacolet Mills, of New Holland, Ga., spoke on "Compensation Insurance," stressing the importance of the industry in this state working together in order that it may bunch its insurance, purchasing it from a limited number of companies. This, of course, would insure lower rates, and in the long run affect a considerable saving.

The associaton has been investigating this matter, sending out a number of questionnaires some time ago to the various mills requesting information regarding the plans in vogue. A committee was appointed at the meeting here this week to make a further investigation, and at the next meeting of the organization will report on its findings.

George H. Harris, president of the Exposition Mills, of Atlanta, spoke on social matters and relationship between the mill operators and the employes, advocating a concerted action on the part of the manufacturers to improve the friendly relationship existing between the workers and their employers.

The Georgia association is seriously considering the publicaton of a weekly paper that will be devoted to mill activities and cover the whole industry in the state. It would be something in the nature of a country weekly newspaper, save that it would confine itself to the textile industry.

P. E. Glenn, president of the associaton and treasurer of the Exposition Cotton Mills, of Atlanta, presided at the meeting, with W. M. McLaurine, secretary.

Texas Canvas Men Meet

DALLAS, TEXAS.—The Texas Canvas Goods Manufacturers Association, organized last March at a meeting held in Dallas, held its first annual meeting in Dallas last week with about 30 of the leading canvas makers of the State in attendance. All the officers were re-elected as follows: A. T. Clifton, Waco, president; C. L. Foord, Dallas, vice president; John F. Kattman, Houston, secretary and treasurer. These officers with the following compose the board of directors: David Elsas, Dallas; Glenn Russ, Beaumont; and E. F. Eastman, Houston. Selection of a meeting place for the next annual meeting will be left to the board of directors or to a called meeting to be held some time early in the spring of 1924.

S. T. A. Convention Program

Many Important Subjects to Be Discussed

The program for the meeting of the Southern Textile Association, to be held at the Richmond Hotel, Augusta, Ga., Oct. 12 and 13, has been announced as follows:

Friday, Oct. 12, 10 A. M.

Meeting called to order by G. A. Franklin, General Chairman.

Address of Welcome by Judge Franklin of the Superior Court.

Response.

Report of Weaver's Sectional Meeting by W. H. Gibson, Jr., Union, S. C.

Discussion of Report.

Address by J. I. Howard, Charlotte, N. C. Subject: Cost Accounting as Applicable to Cotton Mills.

Address by George S. Harris, President Exposition Cotton Mills, Atlanta, Ga. Subject: Future Prospects and Possibilities of Southern Superintendents and Overseers.

Barbecue at Carmichaels Club, 2 P. M.

Saturday, October 13, 10 A. M.

Report of Georgia Association.

Presenting New Inventions.

Address by R. W. Arrington, Supt., Union Bleachery, Greenville, S. C. Subject: Mutual Problems of Mill and Finisher.

Address by Miss Katherine Dozier, Educational Director, Pacolet Mfg. Co., Pacolet, S. C., and Gainesville, Ga. Subject: Education In Our Mill Villages.

Business.

For World Wool Grades

English Trade Sees Need of Universal Standards

Co-operative arrangements looking toward the ultimate establishment of universal wool standards have been made with the Dept. of Industries and Manufacturers of Great Britain by American Government and trade representatives, according to George T. Willingmyre, who represented the U. S. Dept. of Agriculture in the negotiations at Bradford, England. P. H. Bates represented the Dept. of Commerce, and Marland Hobbs represented the Research and Standardization Committee appointed by the American manufacturers and spinners' associations.

Mr. Willingmyre brought back with him as a result of conferences with Bradford mill interests and the British Wool Federation, a set of sample grades that represents the composite ideas of the English trade, as to diameter of fibre of the average Bradford quality, based on the English count system. Considerable difference of opinion was found to prevail among the Bradford mills with regard to representative standards, but a single set of grades as to diameter of fibre was finally agreed upon.

Several sets of grades based on the samples approved by the British wool authorities are to be prepared, and a

(*Continued on page* 159)

TEXTILE WORLD Cotton and Wool Index Numbers

SEPTEMBER indices for cotton and its manufactures reflect a situation scarcely less unbalanced and unhealthy than that which had been suffered since May. The September average index of 224, or 28c, for cotton, justifies an advance of at least 15 points in the yarn and cloth index numbers under normal business conditions. It is significant that September averages for the latter were materially lower than in December, 1922, when the cotton index stood at 204, or 25½c, for spot middling upland cotton. It seems safe, therefore, to forecast a further substantial advance in prices of yarns and cloths, unless cotton is to become available for a considerable period around 25c.

Although September average prices and indices for wool and tops are slightly lower than those for August, this loss was practically recovered during the last part of the month and fully justifies the maintenance of yarn and cloth prices. If there is to be any early recession in prices of the latter, it must be the result of an actual or expected reduction in consumption rather than basic weakness in the world wool situation.

COTTON INDEX NUMBERS

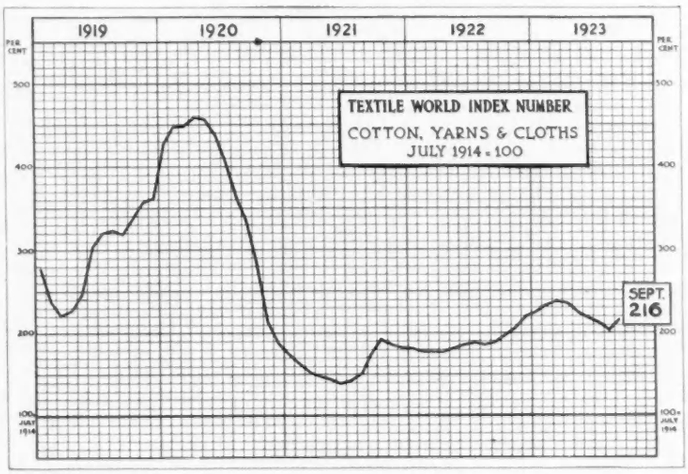
Date 1914	Cotton	Yarns	Gray Goods	Colored Goods	Average for Cloths	Group Average.
July 31	100	100	100	100	100	100
1919						
March	215	221	214	236	226	221
June	262	294	328	292	308	301
September	236	314	350	315	331	319
December	294	350	432	327	376	362
1920						
March	328	531	475	410	440	449
June	317	510	443	427	435	439
September	253	290	300	413	359	335
December	128	142	178	232	206	187
1921						
March	135	125	146	187	168	153
June	100	105	134	171	154	139
September	148	160	172	194	184	175
December	146	163	177	208	193	182
1922						
March	148	160	166	209	189	178
June	167	177	187	200	194	186
September	171	186	194	195	194	189
December	204	218	222	228	225	219
1923						
January	225	225	220	230	225	225
February	226	237	225	239	232	233
March	244	244	230	241	236	238
April	231	239	224	242	233	234
May	217	217	209	240	225	223
June	228	205	202	238	220	218
July	217	197	190	236	212	211
August	196	188	184	227	205	202
September	224	215	207	224	215	216

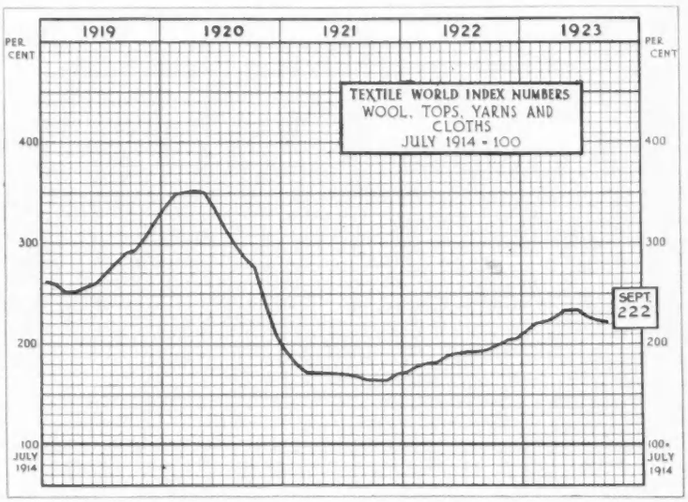
TEXTILE WORLD INDEX NUMBERS

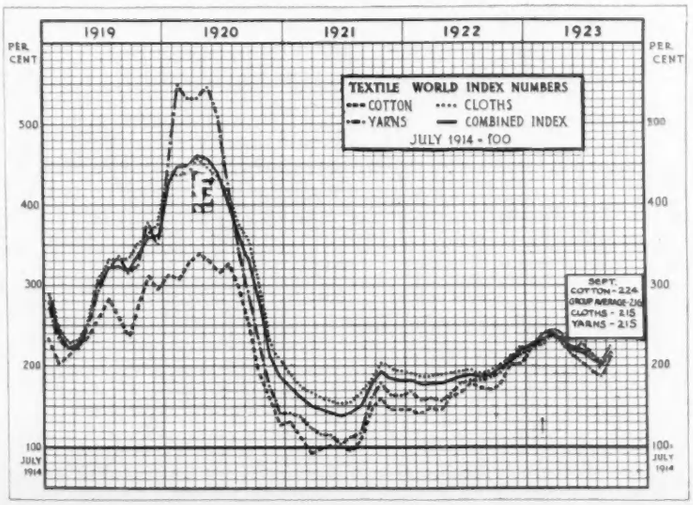
THE index numbers for cotton and wool and their manufactures that have been compiled and charted by TEXTILE WORLD, and that are a regular part of its statistical service, are calculated as a percentage of prices of staple and typical groups of both classes of commodities for July 31, 1914, as the basis (100). This common basis for raw materials, yarns and fabrics makes possible an accurate comparison of percentage fluctuations. Prices of July 31, 1914, were taken as 100 because of the desirability of making comparison with British index numbers compiled on that basis.

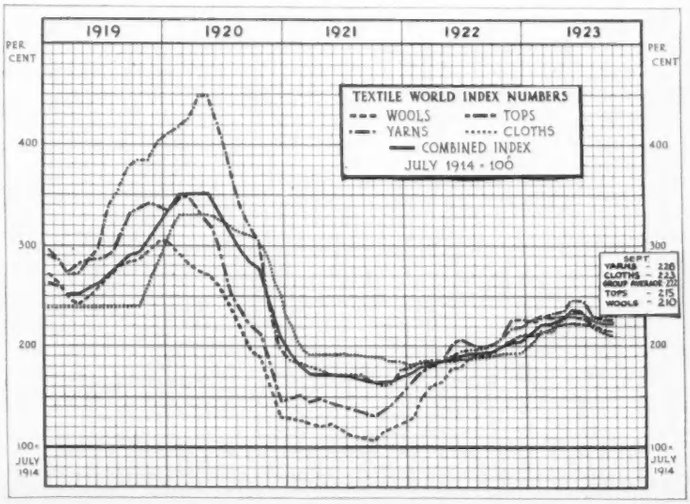
WOOL INDEX NUMBERS

Date 1914	Wool	Tops	Yarns	Cloths	Group Average.
July 31	100	100	100	100	100
1919					
March	247	276	270	237	252
June	260	287	296	237	262
September	284	332	378	237	291
December	304	338	404	286	323
1920					
March	282	348	426	331	350
June	260	300	419	325	335
September	199	224	320	311	285
December	132	147	197	253	210
1921					
March	122	145	179	192	173
June	117	141	172	192	171
September	107	132	165	189	165
December	123	154	177	184	171
1922					
March	162	180	185	184	181
June	178	209	195	186	191
September	192	202	199	190	194
December	211	228	218	191	206
1923					
January	212	225	227	203	213
February	215	231	230	216	221
March	217	229	232	216	223
April	222	230	234	225	228
May	222	230	244	233	234
June	222	229	244	233	234
July	222	223	233	228	227
August	216	217	228	223	223
September	210	215	228	223	222









THE PERSONAL PAGE

As a result of the letter-ballot for officers of the Professional Divisions of the American Society of Mechanical Engineers, George H. Perkins, consulting engineer, 200 Devonshire St., Boston, and James A. Campbell, Pawtucket, R. I., have been elected to fill the vacancies on the Executive Committee of the Textile Division. Messrs. Perkins and Campbell will serve two years. The complete committee of the Textile Division is now as follows: Sidney B. Paine (1923 Chairman), James A. Campbell, George H. Perkins, F. S. Blanchard, and J. E. Sirrine. The new committee goes into office on the adjournment of the 1923 annual meeting. In the near future a meeting of the Executive Committee will be held, or a letter-ballot taken, to organize the new committee and select its chairman.

Open reference to the possibilities of William M. Butler, prominent mill man of New Bedford and Boston, being nominated by Massachusetts Republicans next year for junior United States Senator from Massachusetts was frequently made at the Women's Division of the State Committee at the Regional Conference held in New Bedford last Tuesday, when Mr. Butler and Senator Lodge were among the principal speakers at the session.

A. Roberts, of Crosses & Winkworth Consolidated Mills, Ltd., Bolton, England, is now in this country visiting the various textile centers in the interests of his company, together with their representatives in this country, F. C. Chambers, Philadelphia, and G. K. Westhead, Verona, N. J.

Henry B. Thompson, of Wilmington, Del., president of the United States Finishing Co., and W. T. Joyce, of Providence, R. I., general manager of the same company, have been in Cedartown, Ga., inspecting property recently purchased for a branch plant there.

John Sanford, president of Stephen Sanford & Sons, Inc., Amsterdam, N. Y., and family, have returned to Jericho, L. I., after spending several weeks at Saratoga Springs, N. Y.

James Porter, vice-president of Bibb Mfg. Co., has returned to Macon, Ga., after a visit to Europe.

Miss Beatrice Thayer Norwood, daughter of George W. Norwood, treasurer of the Thayer Woolen Co., North Oxford, Mass., and Paul P. Spaulding, Worcester, Mass., are to be married in the latter city on Nov. 8.

David Bigwood, treasurer of the Bigwood Woolen Co., Spencer, Mass., and Miss Beatrice Worthington were married in that town on Sept. 24.

William Dexter has been elected a director of the Continental Mills, Lewiston, Me., succeeding former Treasurer C. H. Wood.

Don Hurlbut, who has been in charge of the Kingsport (Tenn.) branch of W. B. Davis & Son, will be the general manager of the new plant now being erected by the company in Tuscaloosa, Ala.

The engagement was announced last week of Guy Webster Hunter, of Asheville, N. C., and Miss Helen Wilson, of Atlanta, the marriage to occur in November. Mr. Hunter has been prominently associated for some time with Cheney Bros., silk manufacturers of New York City.

Samuel I. Warren, who has been connected with Cheney Bros. for nine years, will become general sales manager of the dress silks department of the Phoenix Silk Mfg. Co., New York City, on Oct. 15.

Robert West has been appointed agent for the Roxbury Carpet Co., Boston, Mass.

Fred R. Helwig, sales representative of the Superior Silk Mills, Inc., Gloversville, N. Y., and Miss Gladys Sanford were united in marriage last week at the bride's home in that city. Following a motor trip through New England the couple will take up their residence at Gloversville.

Ralph J. Keltie has become associated with Cohan & Michaelson, 263 Summer street, Boston, dealers in noils, wool and waste. He was formerly with Chester S. Brett, Inc., of Boston, and Arthur I. Darman of Woonsocket, R. I.

J. Howard Stevens, buyer for the Mann & Stevens Woolen Co., East Brookfield, Mass., who was married in Portland, Ore., on Sept. 15, returned home with his bride on Sept. 26.

W. E. Hammond, superintendent of the Hermitage Cotton Mills, Camden, S. C., has resigned.

J. S. King is now superintendent of the Easley (S. C.) Cotton Mill No. 1. He was promoted to this position from that of overseer.

W. P. Cargill, superintendent of the Loray Division of the Manville-Jenckes Co., Gastonia, N. C., has resigned to accept a similar position with the Hermitage Cotton Mills, Camden, S. C.

Gerald L. Chapman has been appointed superintendent of the Woodstock Cotton Mills, Anniston, Ala. Mr. Chapman was formerly employed at the Durfee Mills, Fall River, Mass.

J. W. Corley, superintendent of the Vardry Mills, Greenville, S. C., has resigned to accept a position as general manager of the Corley Mills, Inc., Cumberland, N. C.

E. R. Gales, superintendent of the Raeford (N. C.) Cotton Mills Co., resigned recently and is now with the Ernaldson Cotton Mill Co., St. Pauls, N. C.

P. W. Pollard, formerly superintendent of the Fountain Inn (S. C.) plant of the Woodside Cotton Mills Co., is now superintendent of the Simpsonville (S. C.) plant of the same company, having been transferred there to succeed the late J. Q. Adams.

Max W. Higgins, night overseer of weaving for the Stonecutter Mills Co., Spindale, N. C., has resigned and accepted a position as designer at the Watts Mills, Laurens, S. C.

R. A. Littlejohn is now overseer of weaving at the Red Springs (N. C.) Cotton Mill Co. Mr. Littlejohn comes from Greer, S. C.

O. L. Derrick now holds the position as night overseer of carding at the Marlboro Cotton Mills, No. 5, Bennettsville, S. C.

Arthur Brooke has taken the position as overseer of carding for the Hecla Mills, Uxbridge, Mass. Mr. Brooke was employed in large mills in Canada before coming to this country.

Charles Chenelle has taken the position as overseer of carding for the Fuld & Hatch Knitting Co., Cohoes, N. Y.

James E. Houlihan, overseer of finishing for the Slingsby Mfg. Co., Brantford, Ont., Canada, has severed his connection with that company.

Thomas Howard has succeeded Edward S. Edge as overseer of the cloth room of the Fisher Mfg. Co., Fisherville, Mass. Mr. Howard, who comes from Pawtucket, R. I., recently returned from India.

Thomas E. Kidd has taken the position as overseer of dyeing for the Rock River Woolen Mills, Janesville, Wis. Mr. Kidd was formerly employed by the Farnsworth Mills, Central Village, Conn.

Joseph Shearer has taken the position as overseer of spinning for J. Broadbent & Sons, Unionville, Conn. Mr. Shearer was formerly employed at Moodus, Conn.

T. E. Liler now holds the position as overseer of twisting and finishing at the Marlboro Cotton Mills, No. 5, Bennettsville, S. C.

M. F. Sullivan, overseer of finishing for the Merrimack Woolen Corp., Dracut, Mass., for a number of years, has severed his connections with that company. He is succeeded by James Quinn of Worcester, Mass.

Owen F. Platt has taken the position as overseer of dyeing for the Colonial Woolen Mills Co., Cleveland, Ohio. Mr. Platt was formerly employed at Louisville, Ky.

Tom Owens has been promoted to the position of overseer of the cloth room in Mill No. 1 of the Easley (S. C.) Cotton Mills.

Daniel A. Brophy has taken the position as overseer of dyeing for the Slingsby Mfg. Co., Brantford, Ont., Canada. Mr. Brophy was formerly employed for the Stroock Plush Co., Newburgh, N. Y.

H. B. Holmes has taken the position as overseer of spinning and twisting for the Wottoquottoc Worsted Co., Hudson, Mass. Mr. Holmes comes from Providence, R. I.

S. B. Parler, a landscape architect for the Baldwin Cotton Mills of Chester, S. C., was married last week to Miss Helen Pitts of Scottsville, Va., the wedding occurring at the home of the bride's parents. After a brief wedding trip Mr. and Mrs. Parler will return to Chester to make their home.

T. R. McClure, who was overseer of finishing at the Dunn Worsted Mills, Woonsocket, R. I., resigned recently.

William Tedd has taken the position as overseer of weaving for the Colonial Woolen Mills Co., Cleveland, Ohio. Mr. Tedd comes from Lawrence, Mass.

Edgar Broyles has taken the position as overseer of finishing for the Slingsby Mfg. Co., Brantford, Ont., Canada. He was formerly employed by James & E. H. Wilson Co., Pittsfield, Mass.

S. V. Byers has resigned as overseer of weaving at the Dwight Mfg. Co., Alabama City, Ala.

J. M. Mobley, overseer of dyeing at the Deep River Mills, Inc., Randleman, N. C., has accepted the corresponding position with Opelika (Ala.) Mfg. Co. Before going to Randleman, Mr. Mobley was connected with Newnan (Ga.) Cotton Mills.

J. H. Higginbotham was recently appointed overseer of weaving at the Social Circle (Ga.) Cotton Mills Co.

Tom Poteat is now overseer of carding at the Valley Waste Mills, La Grange, Ga.

James Swainsbank has succeeded James H. Catlow as overseer of weaving for the Fisher Mfg. Co., Fisherville, Mass. He comes from New Bedford, Mass.

A. J. Kelly is now overseer of carding at the Raeford (N. C.) Cotton Mills Co. He recently resigned as night overseer of carding at another mill of the same place.

Z. P. Doby, master mechanic for the Norwood (N. C.) Mfg. Co., who has been in the Charlotte (N. C.) Sanatorium following an operation, is rapidly improving and will soon be able to go back to work.

Frederic E. Durfee is now master mechanic at the Higrade Yarn Mfg. Co., Stuyvesant Falls, N. Y. Mr. Durfee comes from Fall River, Mass.

T. E. Howard, second hand in carding at the Prendergast (Tenn.) Cotton Mills, has resigned to become overseer of carding in a mill in Lenoir City, Tenn.

Harry Grotto, second hand in the finishing departmnt for the Wyandotte Worsted Co., Waterville, Me., has been promoted to the position of overseer of that department.

A. C. Giles is now night second hand in the weave room of the Red Springs (N. C.) Cotton Mill Co. He formerly held a position with the Louisville (Ky.) Textile Co.

Alexander Arnett, who has been second hand in carding at Lumberton (N. C.) Cotton Mills, has resigned and is now second hand in spinning for the Ernaldson Cotton Mill Co., St. Pauls, N. C.

Charles W. Moell is now second hand in weaving at the No. 3 plant of the Conestogo Steam Mills (John Farnum Co.), Lancaster, Pa.

S. V. Byers, assistant overseer at the Dwight Mfg. Co., Alabama City, Ala., has resigned to accept a position as assistant superintendent of a cotton mill at Duke, N. C. Mr. Byers has been identified with the Dwight Co. during the last four years.

POWER AND ENGINEERING SECTION

Motor Drive in Old Mills

Proportion of Electrically Driven Spindles in the South—Varied Power Problems in Mills—Drives and Methods of Applying Motors—Typical Layout in a Recently Electrified Mill—Cost of Applying Motors in an Old Mill—Source of Power and Steam for Processes

By *H. W. Reding**

IT is interesting in taking up the subject of motor drive in engine-driven mills to see what has been done and how much remains to be done along this line. According to recent information there are in the seven southern States, where there is the greatest interest in textile manufacturing, 15,646,000 spinning spindles. Of these 10,112,000 are driven electrically and 5,534,000 are driven by steam engines or water wheels. There are several qualifications applying to this division of spindles, such, for instance, as mills which buy secondary electric power and operate by engine part of the time. But the figures are sufficiently accurate to show what the southern mill owners think of electric drive.

The figures also show the field of work for those interested in changing southern mills over from steam to electricity. Of the five and one-half million spindles not now driven electrically, a large proportion are in mills that are now, or within a few years will be, in a position to consider changing to motor drive.

Varied Power Problems

The mills operating these five and one-half million spindles represent a great many different problems. Some are driven by water power and have the possibility of generating their own electricity by water, and of motorizing the mills. Others can or soon will be able to buy energy from the lines of some power company. Still others are driven by engine and can consider putting in a generator to be driven from the engine. Or if the condition and efficiency of the engine would not warrant this a steam turbine might prove to be a profitable investment.

There are doubtless cases where an electric drive would be an economic impossibility, but the unfortunate thing is that there are many mill men whose experience includes no knowledge of electric drive who, without an impartial investigation, arbitrarily conclude that their engine or water wheel drive cannot be improved upon. There are also some who are still satisfied with what was the best they could get 30 years ago, and who frankly prefer engine drive regardless of possible advantages of motor drive. It is encouraging to note that these types of men are rapidly changing their views.

Fundamentally, there is only one reason for discarding a steam engine drive and substituting motors; that is the reduced cost of manufacturing the yarn or cloth. There are several things about motor drive which tend to produce this result, not all of which are always experienced. It frequently happens that the actual expense for power is reduced when electricity is substituted for steam, although there are cases where the power bill has increased.

Some mills which are able to buy power service find that they can afford to pay a higher rate per horsepower hour for purchased electricity than the same power would cost them when generated by their own steam engine on account of the insurance against shut down. In other words, the loss of production due to shut downs in their own plant more than offsets the additional cost of purchased service.

Other advantages to be obtained with a modern system of motor drive are improved quality of product, due to a decreased amount of fly, dirt and oil falling on the work; uniform speed; greater safety to employes; and better light and working conditions. But the principal and important reasons for the reduced cost of manufacture are increased production and greater flexibility.

Constant Speed, Flexibility

If we remember that a motor carrying a constant load can be counted upon to maintain a constant speed from one day's end to the next, and that modern systems of drive place the motors so near to the machinery that the slippage of belts is either entirely eliminated or greatly reduced, we have accounted for the increase in production obtainable by motor drive.

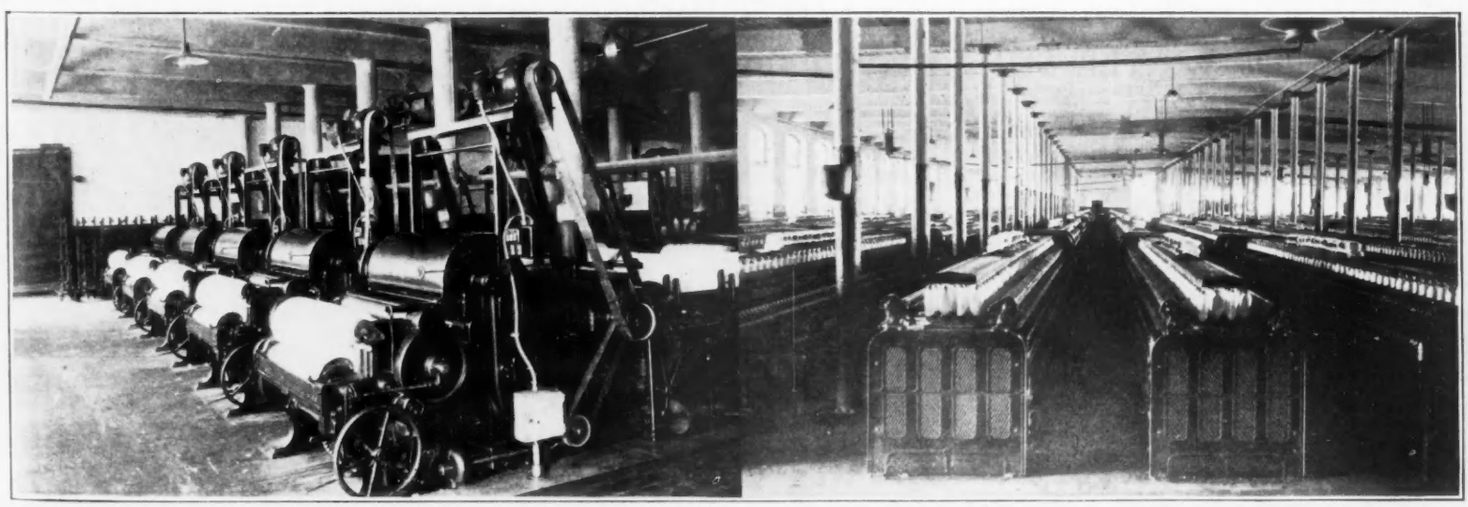
With a motor which will give a constant speed, it is possible to drive the machinery at the highest possible speed at which it will run and make a product satisfactory as to quality and quantity. The elimination of fluctuations and jerks in the speed makes this possible.

The feature of flexibility of operation is admitted by nearly everybody. The ability to operate a department overtime with no increased unit cost, the ability to shut down a group of machines early and save all power cost connected with that group, the opportunity to make small additions from time to time without reference to the shafting layout, are advantages that are easily recognized and admitted by many who profess no interest in the question of motor drive.

Application of Motors

The drives and methods of applying motors to textile machinery are constantly being changed and improved. Old objections and difficulties are being eliminated and more flexible, reliable and economical systems of drive are being developed. To illustrate some of the things being done it will be of interest to consider a typical layout of recent design with a discussion of some of the possible alternatives.

The opener room contains a vertical opener with feeder, driven by a ceiling mounted motor driving a shaft. The control switch for this is a magnetic switch mounted near the motor and controlled by a push button on the wall. Compared with many types of switches in use, this is more positive and less subject to damage on account of carelessness of operators. The motor has complete overload and underload voltage protection. In other cases vertical openers have been driven by direct connected vertical motors. The cost of the motor is in-



Views in Two Rooms at Dallas Manufacturing Co., Huntsville, Ala., After Motor Drives Had Been Installed. At Left, Individual Drives on Pickers; At Right, Individual Drives on Spinning Frames

* Lockwood, Greene & Co., Engineers, Atlanta and Boston.

157-foot Tower at a Plant now under Construction

AN INDUSTRIAL PLANT IN THE MAKING

VI -- FIRE PROTECTION & WATER SUPPLY

IN THE REFINEMENT OF INDUSTRIAL PLANT DESIGN IT IS OFTEN APPROPRIATE THAT A GRACEFUL STRUCTURE SUPPLANT THE USUAL UNSIGHTLY WATER TOWER.

A LATER VIEW WILL SHOW THE ARCHITECTURAL TREATMENT OF THIS 157-FOOT TOWER, ERECTED TO HOUSE THE PLANT'S 100,000 GALLON TANK FOR WATER SUPPLY AND FIRE PROTECTION.

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creased, but the belting and shafting required is decreased.

The fan condenser and distributor system in the picker room are operated in a group driven by one motor. The pickers are all individually driven by motors mounted on A-frames. While some mills find a group drive satisfactory in the picker room the greater flexibility of operation and the cleanliness and ease of maintenance on the individual drive system have made it the accepted modern method of driving pickers in electrified mills.

Had there been double beater pickers, it would have been advisable to use two motors on one A-frame, each driving a beater, and both motors controlled by one automatic switch. Installations of this kind have proved to be highly satisfactory. The alternative to this in the way of individual drive would be one motor with the shaft extended on both ends, each end driving a beater. In this case one extension must be long enough to reach across the picker and requires an outboard bearing. Here we have three bearings to keep in alignment and in a place where there is always a considerable vibration this is likely to give trouble.

Card Room Drives

The cards are driven by line shafting, there being a motor for each line of cards. The drive between the motor and shaft is made by silent chain, although in places where sufficient spacing can be obtained a belt drive might be satisfactory. Greater efficiency of transmission and positive speed maintenance are the advantages claimed for the chain. As to cost, there is little difference if it is necessary to buy a new driven pulley and belt. In some mills belts have been used because they were on hand.

An individual drive for cards is being developed. This drive may be advisable in some particular mills but in most plants being changed from steam engine to motor driven the complication and expense might not be warranted.

In the mill under consideration the drawing is driven from an overhead shaft, which is motor driven through a silent chain. It is often advisable to drive a line of drawing by an individual motor through a chain, but there must be space for the motor which does not interfere with the operation and the movement of stock. This space is not always available.

The roving frames are driven by slow speed two and four-frame motors. The essential point in applying these types of motors is to keep the ratio of motor speed to driven pulley speed low. There is likely to be trouble if the ratio is greater than 2:1 and it is better to have it 1½:1. These motors are controlled by magnetic switches and push buttons and there are not large unsightly and obstructing switches on the columns.

Spinning Frame Drives

The spinning frames in this mill are driven by individual motors and chains and the motors are controlled by shipper rod operated switches. Magnetic switches have been tried with success to control individual spinning frame motors, but the cost of installation is somewhat greater owing to the fact that at least two push button control stations are necessary. In general, there are the three types of spinning frame drive; namely, group, four-frame, and individual, with several modifications of each type.

View in Weave Room of Dallas Manufacturing Co., Showing Present Motor Drive; One Motor Per Shaft

The group system of drive costs the least to install and has very little to recommend it as better than a steam engine drive. The four-frame drive produces a much better result. Taking an average condition, it is safe to say that a good four-frame drive installation produces 5% more yarn than a steam engine drive. This system of drive has an important field of application in crowded rooms where there is not sufficient room to install individual motors; also in certain mills where the machinery is old and there is serious question as to the advisability of putting in a relatively expensive individual motor drive on such old machinery. Each mill presents a problem to be studied and worked out.

Four-frame motors are of two general types. The older type has a shaft extension on each end of the motor with a double crowned pulley on each end. The type requires a spacing of frames which exactly fits the motor. This space is not sufficiently wide for a good trucking alley and is therefore largely wasted.

The so-called universal type has an extension of the motor shaft at one end only. The extension is supported by one or two extra bearings and is long enough to accommodate the frame spacing which is needed. This type is more expensive than the motor with shaft extension on each end, but in most cases is fully worth the additional price.

As mentioned above in connection with roving frame drive, the speed ratio between motor and frame pulley is important. The most satisfactory four-frame motors have a drive ratio of approximately 1:1. The vertical belt from motor to frame is at best a bad type of drive and unless care is exercised in the design the four-frame motor will produce no better results than the original steam engine drive.

The individual motor drive with silent chain has so far proved to be the best system of driving spinning frames. There is the assurance that with this drive there will always be a constant and even speed, giving the conditions required for the highest quality and greatest quantity of production. Individual drives will give from 5 to 12% more production than a steam engine drive.

In mills where there is no need to change cylinder speed, there is the possibility of connecting the motors directly to the cylinder shafts; a simple and satisfactory drive in certain places. A short belt drive is now being sold for individual spinning frame motors. It is said to give uniform speed and is simple to install and maintain. No strict alignment is necessary. This drive contains interesting possibilities and may become an important addition to the art of driving textile machinery.

Motors in Weave Room

In applying motors in a weave room originally driven by an engine, the group drive system is usually followed. One motor to each line of shafting with chain drive seems to be the most acceptable plan. In some cases individual motors have been applied to old looms. This drive gives the constant and even speed which results in better cloth and greater production. In addition, such an installation gives better light and cleaner working conditions. Where looms are approaching the limit of their usefulness individual drive would not be warranted, but in this case they can be driven by motors in groups.

Other types of machinery, such as spoolers, warpers, slashers, cloth room equipment, machine tools, etc., are almost always driven in groups. In new mills spoolers are sometimes driven by individual motors, but it is doubtful if this would be advisable with old machinery. Winders are also frequently driven by individual motors. In mills with belt driven winders it is often found that two or four-frame motors make a neat and economical drive.

Cost of Electrification

The cost of applying motors to an old mill cannot be stated in general terms. Again reference will be made to some recent typical installation in order to give some idea of the cost.

A spinning mill making 30s-2 yarn required 58 connected horsepower per 1,000 spinning spindles. The pickers have individual drives; cards are driven in small groups; roving frames, spinning frames, twisters and winders have four-frame drives; and other machinery is driven in small groups. The cost of converting this mill to motor drive was $35 per connected horsepower.

Another mill quite similar and with similar drives, except individual drives on spinning frames and twisters, cost $45 per connected horsepower. A sheeting mill would require 55 to 60 connected horsepower per 1,000 spindles and the cost per horsepower would be about the same as in the instances mentioned above, depending on the system of drive selected.

Source of Power

The question is frequently asked as to whether it is cheaper to buy power or to make it. Again it depends on the particular conditions, but let us assume a case of a typical mill near the line of a large power company. Let us assume that the mill requires an average of 800, and a maximum of 900 kilowatts. A 1,000 K. W. turbine plant would furnish all the needed power.

Such a plant complete and new would cost not less than $110,000. Let us assume that coal costs $6 per ton delivered, and make an estimate of the cost of current as generated by the 1,000 K. W. plant. Fixed charges would be about 15% on the investment, or $16,500 per year. If the plant operated 3,000 hours per year there will be 2,400,000 K. W. H. generated. If the plant makes a kilowatt hour for 2.5 lbs. of coal it will require 3,000 tons per year of coal.

Summary

Fixed Charges	$16,500
Coal	18,000
Labor, Supplies and Misc	6,000
Total Cost of 2,400,000 K.W.H.	$40,500

Cost Per K.W.H. = 1.69c.

The average rate for several large power companies in the South on power in this quantity is 1.18c. This would indicate that purchased power costs much less than that generated in a privately owned plant. An estimate made for some particular condition might show a different result, but the result here shown is typical of many.

There are many cases where no purchased power service is available, and if electricity is to be used it must be generated locally. The fact that there are many such installations brings us at once to the conclusion that there are possibilities of reducing costs by putting in such plants. There is also the possibility of using a mixed

Marvin Carr Building of Durham Hosiery Mills

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S SERVICE

pressure turbine; a part of the mill would be driven by the engine, using the engine exhaust in the turbine, and driving the balance of the mill with electricity. This type of plant works in nicely under certain conditions. Other plants find it economical to drive a generator by main engine, thus generating the necessary electricity to drive the mill.

Where mills are driven by water wheels it almost always pays to drive a generator from the wheel and transmit the power through wires and motors instead of through shafting and belts.

Auxiliary Power

The question of cost of power is always tied up with the cost of producing steam for heating, slashing, dyeing, etc. A mill using a considerable amount of steam in dye vats, dryers, tenters and calenders, or other finishing machinery, will frequently find that it will pay to generate at least a part of its own power with a turbine, extracting steam at a suitable pressure for the process work. The energy which can be obtained from this process steam between boiler pressure and, let us say, 20 lbs., costs practically nothing. A situation of this kind demands careful study to make sure that the demand for process steam is sufficient in volume and sufficiently constant to warrant the installation of an extraction turbine.

A much more typical layout is that of a mill having nothing requiring steam but slashers and a mill heating system. The steam required by a slasher varies widely with the kind and amount of yarn sized, the type and condition of the slasher, and the care exercised in operation. If we assume an average condition as to yarn and a mill having two slashers operating 10 hours per day, it would be a fair estimate to say that the cost of coal for slashing would run about $100 to $125 per month.

As to heating costs it would be interesting to one investigating the subject to know approximately what other mills have found. Records from

(*Continued on page* 119)

Boiler Inspection

What Constitutes an Inspection—Proper Attitude of the Plant Manager and the Plant Engineer Toward the Inspector—Preparation for Inspection—Troubles and Defects to Be Looked For and the Means of Avoiding or Overcoming Them

(*Concluded from Sept. 1 issue*)

THE inspection of a return tubular boiler has many features in common with that of the vertical boiler; and in addition it has some that are peculiar to its type. Upon entering the furnace the lowest portion of the front sheet should be examined for bulges, or bags, as they are sometimes called. This part of the boiler receives the most heat. If for any reason a deposit of dirt or scale collects inside the boiler in sufficient amount to keep the water from the metal at the lowest point of the boiler, the intense heat will soften the plate and the sheet will bulge sometimes even to rupture from the internal pressure.

The condition of the brickwork should be noted, as it is not desirable to allow the hot gases to pass up between the shell and the side walls to those parts of the boiler that are above the waterline. This will happen if the brickwork is not kept in good repair. The same applies to the bridge-wall. A defective bridge-wall also lowers the efficiency of a boiler.

Examine Exposed Joints

Here, as before noted, all exposed joints should be carefully examined, any deposit or scale removed, and the plate examined for corrosion. The blow-off pipe and connection on this type of boiler require special attention from the fact that they are located in the direct path of the hot gases. Corrosion may occur at the flange or where the pipe screws into the flange. The pipe itself may waste away, and to prevent this it should be protected in some of the various ways from direct contact with the products of combustion.

There are numerous methods of doing this, and one precaution must be observed in them all. The pipe must be free to move in or out of the back wall as the boiler expands and contracts. A firebrick hood may be used, a cast iron sleeve may be slipped over the pipe, or there may be a covering of some form of non-conducting material.

One scheme recommended is first to paint the pipe with a batter made from high temperature furnace cement; then apply a ganister covering made up of high temperature cement and crushed fire-brick that has been passed through a ⅛-inch screen. The whole should be given a wash coating of high temperature cement.

The rear tube sheet and the tube ends should be examined just as noted in the case of the vertical boiler. In the horizontal type of boiler, however, there is more opportunity for corrosion or wasting away of the metal due to leakage, since the leakage from a tube high up on the sheet can run down across the entire diameter of the head, causing scale deposit and corrosion all along the path of the water. The brickwork and rear arch should be in such condition that the hot gases will not have access to the upper and dry portions of the rear head. Tubes should be examined for inside soot deposits, which would greatly lower the boiler efficiency.

Upon entering the boiler the condition of the joint at the reinforced man-hole flange should be noted, and the rivets of the same given the hammer test. The stays should be examined to detect any loose ones. Any that are seriously bent should be removed and shortened by upsetting, and then replaced. A defective brace is likely to prove serious.

Corrosion and Pitting

Tube and other sheets should be gone over carefully for pitting and grooving. Where there is a scale deposit inside a boiler there will probably be no corrosion, since the former acts as a protective coating; an expensive one, however. At this point it might be well to distinguish between corrosion, pitting, and grooving.

Corrosion is the gradual wasting away of the plate or rivet, generally on the outside of the boiler, and is associated with leakage and soot and ash deposits. The metal is dissolved by the action of the water, which generally is slightly acid. Corrosion also takes place within the boiler over large areas, often from the fact that the feed water is on the acid side.

Pitting is in one sense localized corrosion, and appears as small pits or depressions, generally formed under a bit of scale or rust. It is frequently due to electrolytic action of some form. This may arise from leakage of current electricity from nearby circuits, or it may come from local electric current set up in the metal itself between the metal and one of its oxides as represented by a rust formation.

A little lump of scale or rust will be noted on a tube or sheet. If this be scraped off there will be found a more or less pronounced pit or depression beneath. The metal has been dissolved by an electric action due to a current set up between the steel and the rust. It is most evident at the water line where the surface is alternately wet and dry. If the feedwater is at all acid the pitting action will be more marked. Impurities in the steel, as a bit of slag, will often start the action.

Cause of Grooving

Grooving is the result of the weakening action caused by the repeated bending of some section of a sheet or head due to the expansion and contraction of the boiler, the location of the stays, etc. The first noticed is perhaps a crack. Corrosion then starts and rust forms. This rust is loosened by the repeated movement of the plate. Fresh metal is exposed, new rust forms, and so on, until finally the plate is greatly weakened. Grooving is most liable to occur near lap joints, or where the plate is flanged over, as at the point where the head of a drum meets the cylindrical part of the shell. Grooving is never found on double strap joints.

Water Tube Boilers

The inspection of water tube boilers of whatever make introduces some features not encountered in the inspection of either the vertical or the horizontal type of firetube boiler. Upon entering the furnace the external condition of the tubes is first observed. If there is much soot deposit present there is the same danger from corrosion going on beneath. The underside of the lower rows of tubes should be examined for small bulges or blisters. If any are found the tube caps of that particular tube should be removed and the inside of the tube closely observed.

Almost invariably there will be found a small mud or scale deposit directly over the bulge or blister. If none is found then it has been dislodged when the boiler was drained. This localized deposit has kept the water from the metal, which has become overheated, and the internal pressure has caused the bulge. If the hump is small it can usually be hammered back, but if of any size it is advisable to put in a new tube.

Sometimes a slight blister will be found on a tube or sheet. This may be due to a lamination of the metal where a bit of slag was imbedded in the metal at the time of manufacture. This was much more common in the older boilers, but modern methods of making steel have practically eliminated this trouble.

The condition of the baffle walls should be carefully noted and reported upon. A broken down or otherwise defective wall will not only greatly lower the boiler efficiency, but by permitting the highly heated gases direct from the furnace to pass to those portions of the boiler that were never intended to be subjected to such temperatures, may cause serious damage.

Joint Leakage

The riveted joints of the drums, particularly the girth seams, should be examined for leakage. Leakage inside the setting of a watertube boiler may continue unnoticed for a long time. Meanwhile the plate or rivet is being worn away by erosion and corrosion and the possibility of stopping the leak diminishes.

Right here attention may well be called to a rather recently identified cause for certain types of joint leakage. Frequently it has happened that repeated leakage having occurred at some particular spot, it was discovered that the plate at that point seemed to be very brittle, and caulking was not effective in stopping the leakage. Formerly the trouble was attributed to the defective metal. Investigation

showed that in each case of this nature the feed water contained a large amount of sodium carbonate or bicarbonate. This was present either in the natural state, as in those waters that came from artesian wells, or came from the use of an excess of boiler compounds containing soda ash. In one instance in mind the compound used was tri-sodium phosphate.

Caustic Embrittlement Theory

From a study of many similar cases was developed the so-called caustic embrittlement theory. This theory in brief is that when an excess of sodium carbonate or bicarbonate is present inside a boiler, particularly if the pressure is above 150 pounds, caustic soda will be formed due to a hydrolizing action. The caustic soda will accumulate in concentrated condition in the crevices between the plates at the joints, especially if there be an initial leak from some other cause. There will be a dissociation of the caustic soda; free hydrogen will be liberated which will be absorbed by the steel. This causes the metal to become brittle with the result that the joint cannot be made tight by caulking.

A favorite place for this to occur is at the pocket between the sheet and the cross-box, or it may take place at any joint. In some boilers the design at certain points had to be changed to eliminate pockets where this action repeatedly occurred.

The theory is one that is difficult of direct proof, but many instances are on record where by removing the excess of soda in the water the trouble has ceased. Everyone who has operated multiple evaporators in the recovery of caustic soda is familiar with the marked brittleness that is found in the tubes of the effects. This fact tends to prove that the theory is correct.

If the boiler is equipped with some form of sootblower it should be noted if any of the steam jets impinge directly upon the tubes in such a way as to damage the tube. Sometimes there will be a variation in the spacing of the headers, which will in turn cause the tube spacing to vary. If the jets in the cross pipe of the sootblower are evenly spaced one or more jets may strike the tubes so that a hole will eventually be worn in the tube by the erosive action of the steam. Instances are known where this happened, and a sootlower cross pipe of special spacing has been necessary.

Sometimes if the drip valves are not properly operated to clear the sootblower lines of water before blowing the tubes, the water is blown in upon the tubes, where it mixes with the soot and ash to form a deposit that hardens and adheres to the tubes.

Corrosion of Nipples

At the back of a boiler where short nipples connect the rear tube headers with the mud drum, these nipples should be carefully examined for corrosion. The spaces between these short tubes are usually packed with asbestos, but in the course of time some soot and dampness get in next to the tubes and corrosion begins. To prevent this from increasing it is advisable occasionally to remove the asbestos, thoroughly clean the nipples of all deposit and then paint them with some kind of protective coating. New asbestos should then be put in place.

The spaces between the front and rear tube headers should be kept well packed with asbestos to prevent the hot gases from reaching the tube caps. The outside of the mud drum must be cleaned of soot and ash to prevent corrosion.

The top half of the drums of water tube boilers are usually so covered with brickwork or other material that the plates and joints cannot readily be examined. One must be on the watch therefore to observe any place in these coverings that gives evidence of water dripping down upon it from any source. This water will percolate through the brickwork or other covering, eventually reach the drum and corrosion will result. Serious damage has been caused by leakage from overhead steam or water pipes, and from defective roofs. This point applies also to return tubular boilers.

Inside the drums the same points as cited when considering the inspection of the return tubular boiler should be covered by the inspector. There will be more or less scale found on the sides of the drum at the water line, and upon the amount and nature of this scale will depend the recommendation that will be made as to the use of boiler compound. If scale is absent pitting may be going on due to the water being acid.

Frequently the feed pipe will be found to have loosened and dropped. This should be replaced and made secure to insure a correct distribution of the feedwater as it enters the boiler.

Removing Oil and Grease

It may happen that there will be evidence of oil in the feedwater as shown by a film on the inside surface of the drums. This film, by keeping the water from the metal, may cause overheating and leakage. If such is found it can best be removed by filling the boiler nearly full of water, and introducing soda ash in the proportion of from 1/10 to ½ lb. per rated horsepower of the boiler. Then with a slow fire keep the water just at the boil for 24 hours, having the stop valve closed but the safety valve blocked open so that no pressure can be attained. The boiler should then be drained and thoroughly washed out to remove all traces of the soda ash. The surfaces should now be free from oil.

This same treatment is often given to new boilers that contain grease and oil that has adhered to the plates during the manufacture.

Care of Idle Boilers

In laying up boilers for any considerable length of time certain methods of procedure should be followed. If the idle period is to be short the boiler may be completely filled with water which should be clean. If the period is to be lengthy proceed as follows:

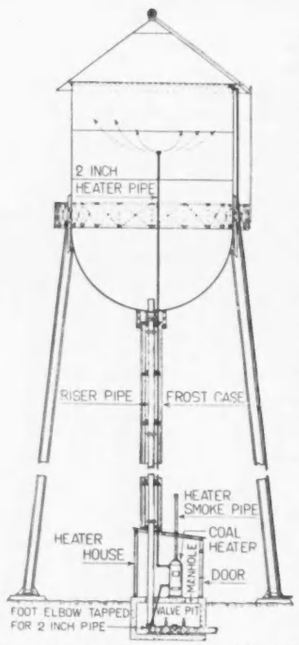
Wash out all connections and introduce several gallons of oil into the boiler. Fill the boiler with water. Then drain the boiler very slowly. As the water level drops a film of oil will be deposited on the surface of the metal. Dry out all moisture by a very light fire, and finally seal up all openings. As an additional precaution some trays containing air-slaked lime may be placed in the drums to absorb any remaining moisture. Before putting the boiler again into operation the oil should be removed as already described.

Causes of Explosions

A boiler explosion is a terrible thing and must be prevented at whatever cost. This and also to detect those conditions that may cause explosions are the real reasons for inspections. The various causes that lead up to explosions may be enumerated as follows: External corrosion, internal corrosion, overheating, general deterioration, over-pressure, defective stays, flue weakness, malconstruction, fracture, scale deposits, pitting, grooving, weak manhole, bad material, absence of safety valves or failure to operate, low water.

These may be grouped under four general heads, viz., defective design, malconstruction, deterioration, and mismanagement. Over the first two

HEATING WATER TANKS



Heating Arrangement for Elevated Tank.

In elevated tanks used for certain purposes the water is stationary all the time, or nearly so. This class includes sprinkler tanks and general service tanks in situations where little water is used. Such tanks are customarily heated in the winter time. Sprinkler tanks located outdoors in the North must be heated to conform to insurance requirements. Those who are contemplating the installation of an elevated tank or have had difficulty with inferior types of heating arrangements, will find the following discussion of the subject, abstracted from *The Water Tower*, published by the Chicago Bridge & Iron Works, of interest.

In some southern locations the heating of elevated tanks is not an important question, and in locations intermediate between the far South and North, protection against freezing is obtained by the use of the elliptical-bottom tank. But where freezing weather is frequent during the winter, a heating arrangement will be necessary for the class of tanks referred to above.

There are two general arrangements for heating. In one, steam is supplied directly to a brass steam coil placed in the bottom of the tank. In the other, a wood or coal fire—and sometimes steam or hot water—is used to heat the water in the reservoir of a small heater. This heated water circulates into the tank through connections provided and heats the tank contents.

When steam is supplied directly to a coil placed in the bottom of the tank, the supply and return pipes are enclosed in the frost casing of a hemispherical bottom tank, or contained in the steel riser pipe of an elliptical-bottom tank.

Indirect Heating

In the indirect arrangement, the heater is placed either in the valve pit at the foot of the riser pipe, or in a small heater house above the valve pit. This heater is made of a cast iron cylinder filled with water, heated by a fire in a fire box below. (When this water is heated by an outside source of steam or hot water, the heat is supplied to the water in the cylinder through a coil placed therein.) A pipe connects the cylinder with the lowest point of the riser pipe and another pipe extends upward from the heater cylinder to the center of the tank.

The water in the heater, after becoming warm, ascends upward to the tank and colder water is drawn from the lower part of the riser. The action is thus continuous and results in maintaining the tank contents at a sufficiently high temperature. When hot water is used to heat the water in the heater cylinder, a larger heater is required than if steam is used.

Much incorrect information regarding the amount of heat necessary to keep the water in a steel tank from freezing has been in circulation in the past. To obtain the facts, the company above mentioned conducted a thorough test with a tank placed on a very high tower in an exposed position on the shore of one of the Great Lakes. This tank had a capacity of 50,000 gallons.

After tests lasting all winter, it was found that the total amount of coal consumed in supplying steam to the tank was very small. A smaller amount would have been sufficient had the temperature of the tank not been maintained at almost 50 degrees F. (higher than necessary) for considerable periods of time. The heating plant which supplied the steam was no more efficient than the average plant. From this test we were able to draw accurate conclusions.

Where heat is supplied from waste steam, the cost is almost negligible. Waste steam does sufficiently well for this purpose except in very cold temperatures.

the owner of the boiler has no control once the boiler has been purchased. The third it may not be in his power up to certain limits to prevent, but it is his duty to be on the watch for it and to act accordingly. For the fourth and last he is directly responsible through the medium of his superintendent, engineers and firemen.

It is the privilege and duty of the boiler inspector to discover instances of faults in the first two groups, to detect and in many instances to anticipate the third, and to point out with force and authority, if necessary, evidences of the fourth. To this end he should have the entire confidence and cooperation of the plant executives and employes. He will not only bring to notice those things which are dangerous or which may become so, but he will also discover and call attention to defects, conditions, and practices that while not affecting perhaps the safety of the equipment or the lives of the attendants, may mean the loss of many tons of coal or gallons of oil to improper methods and poor efficiency. Have faith in the boiler inspector.

Labor-Saving Equipment Economy

Formulas for Computing Savings—Report of A. S. M. E. Committee, Material Handling Division

THE committee appointed by the Executive Committee of the A. M. Materials Handling Division to consider and recommend rational formulas for computing the economic results, under stated conditions, of the installation of labor—conserving industrial equipment, has submitted the following report for consideration.

The problem presented is one of comparative costs. The tendencies in current practice which it is desired to correct are simply lack of consistency in treating the debt and credit items involved. Incidental items, such as interest on investment, taxes, maintenance, depreciation, obsolescence, etc., in other words, "fixed charges" or "burden," are currently accounted on the debit side when calculating the costs of substituting mechanical processes for manual ones. It seems, however, to have been unusual to make any contingent addition in calculating the monetary value of labor saved by improved methods.

In principle the desired formula represents simply a mathematical expression of such debt and credit items as are involved in the proposed new method, or process, as compared with previous practice. In highly organized and thoroughly systematized industrial practice, however, direct expenditures and direct economies are frequently of less importance in their monetary value than related incidental expenditures and economies.

For instance, labor is employed in the mill for processing a raw material, which is thereby enhanced in value and becomes the mill's product. As a rule the total cost of the process will consist of, say, one part "direct labor" (labor which can be charged directly to a single process, or part of the product) and from one-half to three parts "fixed charge," "burden" or operating charge, consisting of "indirect labor" (labor which is of general utility and not chargeable directly), and such items as superintendence, employes' liability, welfare activities, maintenance of buildings and machinery, fuel, supplies, insurance, depreciation, taxes, accounting, etc.

Saving in Overhead

The real problem in composing a formula, therefore, is not one of mathematics, but of economics. Not only should there be added to each dollar expended for improved equipment a suitable incidental amount (in percentage of the capital invested) to cover fixed charges or burden, but also a suitable incidental addition (in percentage) should be made to each dollar's worth of labor saved, as its proportion of "burden" saved. The extent of the expenditure for items accounted as burden will usually bear some fairly proportional relation to the amount of labor performed.

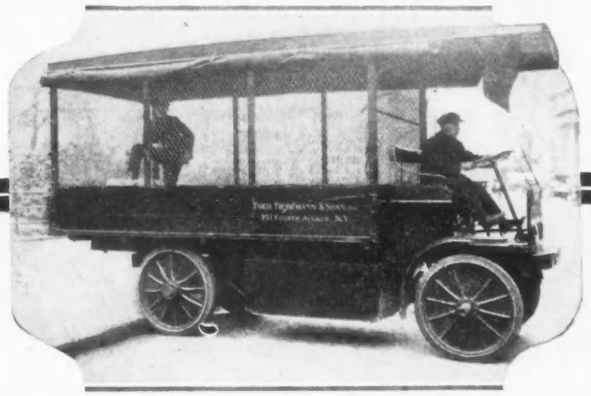
When calculating the cost of the finished product, if an improved process or equipment affects the amount and hence the cost of the "direct labor," then, for the most accurate results, the burden should be applied to labor *saved* at the same rate as labor *used*.

For the purpose of ascertaining the cost of the product, non-productive labor, as a part of burden, should not be considered as subject to any contingent addition for burden. Yet for certain classes of accounting, particularly where comparative economies are being considered, non-productive labor may carry all items of burden that are chargeable to direct labor, except that it carries no contingent addition for its own class of indirect labor. It entails superintendence, employes' liability, welfare work, penalties for overtime and holidays, capital for payrolls, housing, heating and lighting, with the incidental maintenance, taxes, depreciation, and other charges, in the same way as direct labor.

Since a new process must of necessity be considered in comparison with an established process, no "burden" need be considered in respect to the labor used in either case, because the burden charge per unit of labor in one process will offset an equal unit of labor in the other process. The difference in labor required, however, must, in the interest of accuracy, be subject to its appropriate addition for "burden." For this class of cost accounting the cost department of an industry should ascertain the proper percentage to add for burden on both "productive" and "non-productive" labor.

Setting Value on Labor Saved

Handling materials is practically always an important item of cost in



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California Baking Co., San Francisco
Commonwealth Edison Co., Chicago
Cushman Sons, Inc., New York
Dana Warp Mills, Westbrook, Me.
L. F. Dommerich & Co., New York
Franklin Simon & Co., New York
Gimbel Brothers, New York
Golden State Baking Co., San Francisco
Hahn J. Bakery Co., St. Louis
Hamburger's, Los Angeles
Hebard Storage Warehouse & Van Co., Chicago
Jackson Express & Van Co., Chicago
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Knickerbocker Ice Co., New York
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Lincoln Ice Co., Chicago
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Mandel Brothers, Chicago
Manhattan Storage & Warehouse Co., New York
Marshall Field & Co., Chicago
Massachusetts Cotton Mills, Lowell, Mass.
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National Tea Co., Chicago
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Peoples Ice Co., Fresno
Petersen & Pegau Baking Co., Omaha
Old Homestead Bakery, San Francisco
Sayles Bleacheries, Saylesville, R. I.
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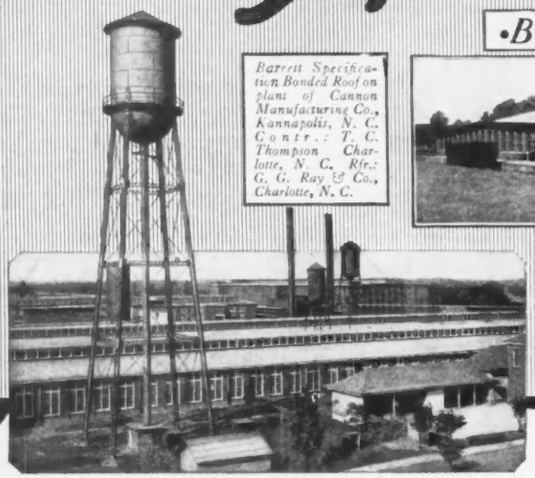

Barrett Specification Bonded Roof on plant of Cannon Manufacturing Co., Kannapolis, N. C. Contr.: T. C. Thompson Charlotte, N. C. Rfr.: G. G. Ray & Co., Charlotte, N. C.

Barrett Specification Bonded Roof on plant of Bibb Manufacturing Co., Columbus, Ga

Bibb Manufacturing Co., Columbus, Ga. Eng.: Roberts & Co., Atlanta, Ga. Contr.: T. C. Thompson & Bro., Columbus, Ga. Rfr.: Interstate Roofing & Foy Co., Anniston, Ala.

When the Manufacturer can be Sure that the Roof is Right

Here are a few of the hundreds of textile mills in the United States protected with Barrett Specification Roofs.

Today these roofs are recognized as the most permanent it is possible to build. They are bonded for twenty years against repair and maintenance expense. Many roofs of this type are in first class condition after forty or more years of service. Moreover, they take the base rate of fire insurance.

Here are the factors on which the leadership of Barrett Specification Roofs is founded. Each factor has a definite value to the textile mill owner.

(1) The Barrett Specification (for flat or nearly flat roof construction) prescribes the number of layers of Specification Felt, the amount of Specification Pitch, the top coat of pitch *poured* (not mopped) and finally the wearing surface of firmly embedded gravel or slag. *No supervision is necessary to see that quantity and quality of materials are right.*

(2) The man who lays the roof must have a name for dependability. Only such men can obtain the Bond for the mill owner.

(3) Highly trained Barrett technical men are on the job to see that The Barrett Specification is followed in every detail. *No supervision by the owner is necessary to be sure that he gets a roof in which material and construction are exactly according to the specification.*

There are two types of Barrett Specification Roofs — Type "AA" bonded for 20 years, Type "A" for 10 years. Send for The Barrett Specification.

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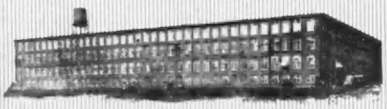
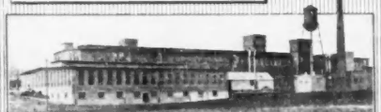
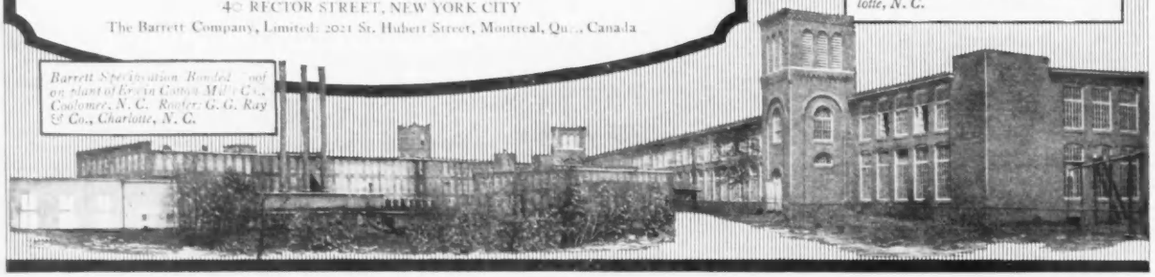


Barrett Specification Bonded Roof on plant of Industrial Cotton Mills Co., Rock Hill, S. C. Engr.: J. E. Sirrine & Co., Greenville, S. C. Rfr.: G. G. Ray & Co., Charlotte, N. C.



Barrett Specification Bonded Roof on plant of Erwin Cotton Mills Co., Duke, N. C. Roofer: G. G. Ray & Co., Charlotte, N. C.



Barrett Specification Bonded Roof on plant of Erwin Cotton Mills Co., Coolemee, N. C. Roofer: G. G. Ray & Co., Charlotte, N. C.

The Barrett Company

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manufacturing. With a complex product it would be difficult to charge handling costs to individual materials; and it is usually accounted as "non-productive" labor and distributed to various items of product, through an addition in the way of a percentage on direct labor, or an equivalent costs. Also in some cases where "burden" is added to "direct labor" in calculating comparative costs, it is omitted entirely where the labor is accounted as "non-productive," or indirect.

Based upon these considerations the following rule for setting a value upon labor saved by an improved process has been evolved:

Whatever valuation is arrived at in cost accounting as the cost per unit of *labor used* in production, also establishes the value per unit of labor *saved* by an improved process. For simplicity, no monetary value need be placed upon labor employed in comparative processes, except upon the amount of *difference* in labor required at the current rate paid, plus "burden" or an equivalent.

Other items of cost should in like manner be accounted at the same rate as for similar items in making up the cost of product.

Increased Productivity

In calculating comparative cost a new item is introduced which never becomes a factor in regular cost accounting, namely, the monetary value of increased production. The profitableness of any industry stands or falls upon the relation between total

WHAT SIZE HOIST?

By *W. F. Schaphorst*

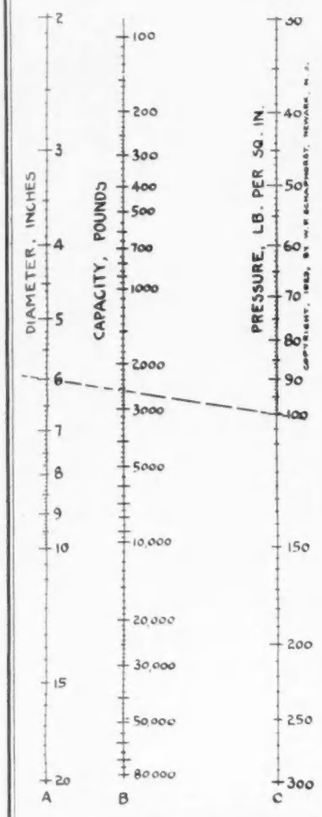

Chart for Indicating Capacity of Air Hoists

Now that compressed air is being used so largely in textile mills, air hoists are coming more and more into prominence. Air is rapidly becoming an important economy factor. There is no medium that is easier to get and use than air because it surrounds all of us all the time.

Users inform us that air hoists, particularly those that are suspended from a track, are great time and money savers. With such a hoist one man can lift any weight—any weight that the hoist will lift—thereby saving the time of several other men and besides doing the work more quickly. If any plant has much lifting to do, and if compressed air is available, an air hoist will pay for itself in a short time.

To assist in selecting air hoists and for determining the capacity and pressure required, the writer has prepared the chart shown herewith, which eliminates all figuring. For example, if you have an air hoist 6 inches in diameter and an air pressure of 100 lbs. per square inch, the dotted line drawn across this chart connecting the 6 in Column A with the 100 in Column C shows in Column B that it will lift a trifle over 2500 lbs. Thus, simply connect the known diameter in Column A with the known pressure in Column C and the intersection through Column B gives the capacity in pounds.

On the other hand, if it were desired to choose an air hoist having a capacity of 2500 lbs., knowing the air pressure to be 100 lbs. per square inch, the same dotted line would give a diameter of 6 inches.

In other words, run a straight line through any two known factors and the intersection with the third line gives the answer. Thus, again, the same dotted line would show that if you want a capacity of 2500 lbs. and you have an air hoist whose diameter is 6 inches, a pressure of 100 lbs. per square inch will be needed to produce the desired capacity.

The chart, as will be noted, has a great enough range to take care of any ordinary requirements, the diameters ranging from 2 to 20 inches and the air pressures from 30 to 300 lbs. per square inch. The capacities, Column B, range all the way from 100 lbs. to 80,000 lbs., or 40 tons.

method, in common with other items of "burden." Here we have an example of labor expended in handling miscellaneous materials which would be accounted as "non-productive" labor.

If, however, we consider the employment of labor in transportation, in the handling of miscellaneous materials, it would naturally be accounted as "direct" labor, since it accomplishes an important and definite step in the process of transportation, and should therefore be subject to its pro rata share of all fixed charges whether it is labor used or labor saved by an improved process or by the substitution of mechanical process.

In the opinion of the committee, current practice which usually takes no account of "fixed charges" or "burden" on the excess of labor used by one process or on the labor saved by another process, represents a grave error in any analysis of comparative

The River Power House of The Victor Talking Machine Company, Camden, N. J., designed and erected by the Organization of the Ballinger Company.

Power Plants

A power plant should be so perfectly adapted to the present and probable future needs of the manufactory it is to serve—it should be so up-to-date from the standpoints of Engineering practice and efficient and economical equipment—that the chance for future change or replacement within several years will be slight.

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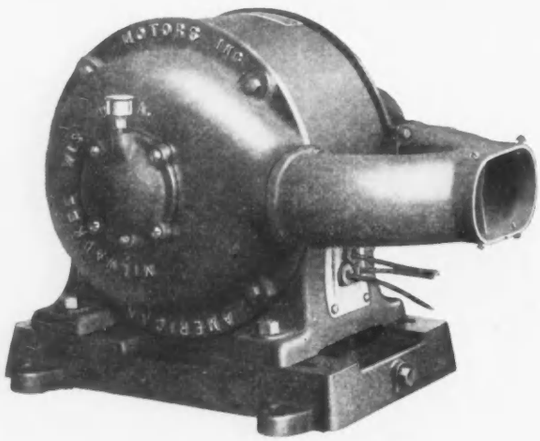

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SEATTLE, L. C. Smith Building
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SAN JUAN, PORTO RICO, Royal Bank Building
HONOLULU, H. T., Castle & Cooke Building

cost of production and total volume, and hence value, of product.

An increase of product with a given equipment will affect the spread between cost and the market value of product just as vitally as an equivalent reduction in some or all of the items of cost. Accordingly, no system of comparative cost accounting can pretend to even approximate accuracy which does not place a suitable valuation upon increased productivity.

In placing a valuation upon increased productivity it should be borne in mind that in any industry the volume of product required to just meet the costs of the plant and a given organization affords *no profit;* also that any product above that amount is obtained without any manufacturing cost whatever; hence the rule:

In a comparative accounting increased production will always carry a higher value than that attached to normal production.

The committee therefore unanimously recommends the following methods:

Let:

Debit Items:
- A = percentage allowance on investment
- B = percentage allowance to provide for insurance, taxes, etc.
- C = percentage allowance to provide for upkeep
- D = percentage allowance to provide for depreciation and obsolescence
- E = yearly cost of power, supplies, and other items which are consumed, total in dollars

Credit Items:
- S = yearly saving in direct cost of labor in dollars
- T = yearly saving in fixed charges, operating charges or burden, in dollars
- U = yearly saving or earning through increased production, in dollars
- X = percentage of year during which equipment will be employed
- I = initial cost of mechanical equipment

Results:
- Z = maximum investment in dollars justified by the above consideration
- Y = yearly cost to maintain mechanical equipment ready for operation
- V = yearly profit from operation of mechanical equipment.

Then

$$Z = \frac{(S + T + U - E)X}{A + B + C + D} \quad \ldots [1]$$

$$Y = I(A + B + C + D) \ldots [2]$$

and

$$V = [(S + T + U - E)X] - Y \quad [3]$$

Feeling that handling machinery, even if left idle a large part of the year, would probably require, under most conditions, approximately the same repair through deterioration as though in use, the Committee makes no deduction for such lack of use in the estimated cost of upkeep C. If greater accuracy be considered necessary, use C multiplied by X in place of C in the formulas.

Applications of Formulas

As an example of an application of the formulas assume that the handling of miscellaneous materials about a factory which has formerly been done by four men receiving $3.50 per day each, or, allowing 300 days per year, at an annual direct cost of $4,200, can be done by one man operating an electric storage-battery industrial truck at a direct labor cost of $1,050 per year, thus effecting a saving at the rate of $3,150 per year in direct-labor cost.

Assume also that through the greater promptness in moving materials and the more continuous operation of machines there is an increase in earnings, due to increased production, valued at $650 per year; also that the labor involved, being accounted as "non-productive," carries a fixed charge or burden of 10%. In actual practice the plant operates 240 days per year or 80% of the time. The various factors, therefore, are estimated as follows:

A = 6% S = $3150
B = 4% T = 315
C = 20% U = 650
D = 25% X = 80%
E = $450

$$Z = \frac{(\$3150 + \$315 + \$650 - \$450) \times 80}{55} = \$5331$$

This indicates that equipment costing any sum below $5,331 will earn some profit above interest on investment and maintenance.

Assume that an electric storage-battery industrial truck will meet the conditions stated and that its cost will be $2,200. Then the yearly cost to maintain equipment ready for operation, exclusive of labor, will be expressed by the formula, $Y = I(A+B+C+D)$ or $2,200 × 55 per cent = $1,210. Then the profit from operation of the mechanical equipment, according to [3], becomes ($3,150 + $315 + $650 — $450) × 0.80 — $1,210 = $1,722.

The profit V, or $1,722, represents an annual earning upon the initial investment, over all items of cost, of over 78%.

If, however, our example be applied to handling cargo at a railroad or marine terminal where the labor is *productive labor* and subject to *all* fixed charges as burden, an important difference in result will be had, indicating the importance of the factors T and U, and the necessity of placing proper values upon them if reliable results are to be had.

As such an example of an application of the formula, assumed that in handling miscellaneous cargo at a marine terminal, work which has formerly been done by four men receiving $3.50 per day each, or allowing 300 days per year, at an annual direct cost of $4,200, can be done by one man operating an electric storage-battery industrial truck at a direct-labor cost of $1,050 per year, thus effecting a saving of $3,150 per year in direct-labor cost.

Since this labor is productive labor, it will bear its pro rata share of all fixed charges, estimated at 50% and to be added to the direct-labor cost, representing a further saving of $1,575 on account of labor. Also that, through the greater promptness in unloading and loading vessels, 5% more ships can be accommodated, accounting for 15 days' extra use of the pier yearly. Assuming the investment in the pier to be $1,000,000 and interest, taxes, etc., at 10%, we have a credit item of 0.5% to be divided, say, between 20 electric trucks, or $250 per truck per annum.

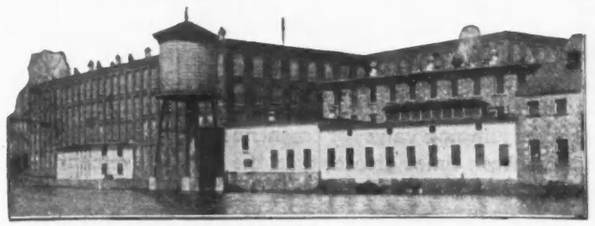
Applying the formulas as in the previous example, we have

$$Z = \frac{(\$3150 + \$1575 + \$250 - \$450) \times 80}{55} = \$6582 \text{ permissible investment.}$$

The yearly cost of operation is Y = $2,200 × 0.55 = $1,210 as in the pre-

Electric Scrubbing!

Reduces Soilage and Spoilage in Textile Mills



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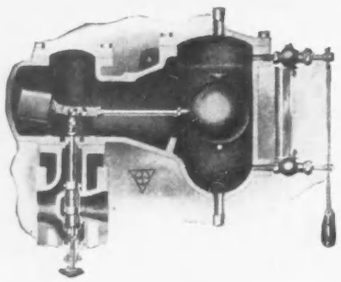

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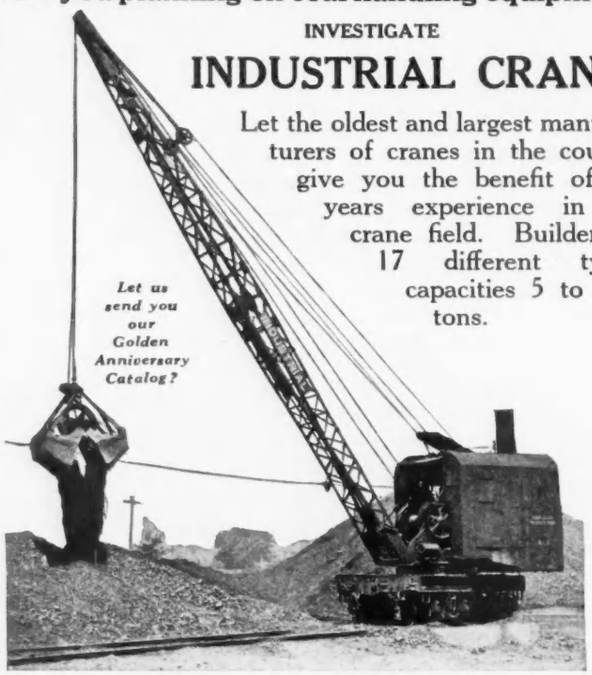

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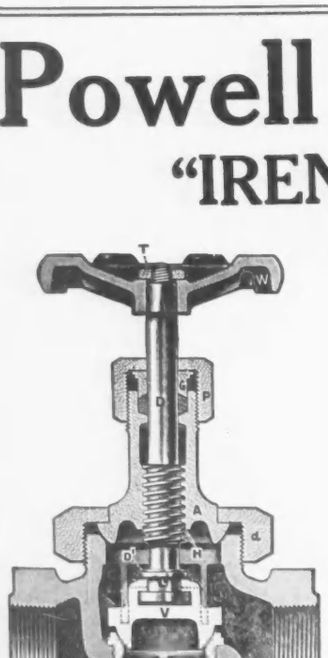

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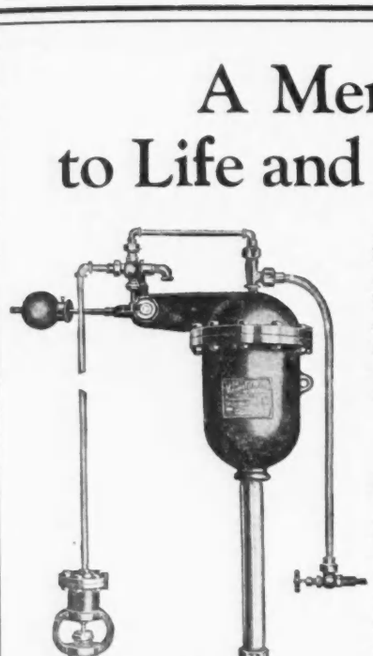

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"Not a Single Failure"

vious example. The profit above maintenance charges, V, will then be ($3,150 + $1,575 + $250 — $450) × 0.08 — $1,210 = $2,410.

The profit $2,410 represents an annual earning of nearly 110% upon the investment in this case in place of 78% in the previous example, all factors having been upon exactly the same basis except T (yearly saving in fixed charges) and U (yearly saving through increased production).

The following summary shows the relative value of the same device applied to two conditions, first, where the labor employed in the work is unproductive as regards producing an article of manufacture, and, second, where the labor used produces the salable commodity, in this case material handling:

	Case 1 Handling in Factory	Case 2 Handling in Marine Terminal
Cost of equipment.....	$2200	$2200
Z, investment justified...	5331	6582
Y, yearly maintenance...	1210	1210
V, profit from installation	1722	2410
Per cent return on investment	78	110

A study of this comparison indicates that with suitable values given to the factors the formulas proposed show not only the advantages obtainable under various conditions, but also that a device may be much more valuable per dollar invested in one industry than in another.—*Mechanical Engineering.*

Steam Plants of Amoskeag Mills

Supplying Power and Process Steam for Cotton and Worsted Plant with 168 Acres of Floor Space

By *Walter G. Diman*

THE Amoskeag Mfg. Co., at Manchester, N. H., controls all the textile manufacturing plants stretching along the east bank of the Merrimac River for nearly two miles, and spanning the river by its own bridge, controls the other mills occupying the slopes on the west bank. The mills have a floor space of approximately 168 acres and have probably grown to their limit in size. Any further development will be more along the line of centralization coupled with electric generation.

The great water power project of the Amoskeag Mfg. Co., which was completed early this year and included the building of a concrete dam 800 feet long and the construction of a new power house for the installation of three 7500-H.P. waterwheel units, was described in the Feb. 3, 1923, issue of TEXTILE WORLD. The present article, abstracted from a paper presented by Walter G. Diman, superintendent of power of the Amoskeag Mfg. Co., at the New England State Association, N. A. S. E. convention, describes the steam plants of the mills which comprise 183 boilers and burn annually an average of 140,000 tons of fuel. Contemplated changes in the steam plants are discussed by Mr. Diman.

As late as 1880 the mills depended mostly on water power to operate the machinery, but for heating and minor purposes boilers were installed. At that time there were 15 boilers, each having 1,500 square feet of heating surface.

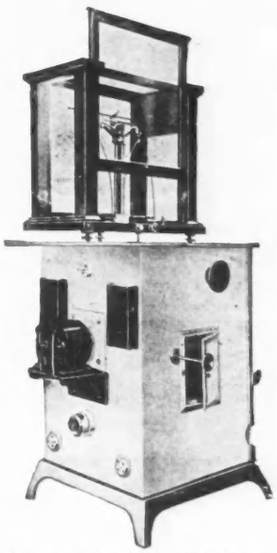
Beginning of Centralization

About 1883 it was thought advisable to concentrate the various boiler plants into one plant. In order to accomplish this, a boiler house was erected on the west bank of the river and steam was distributed from this to the various places then being supplied from the smaller houses. In some cases steam was delivered through large pipes a distance of 1,700 feet with very little drop in temperature. Most of the boilers and piping for this work were manufactured in the plant itself, and it should be a matter of pride to the men who did the work that it has proved so satisfactory through all the time it has been in operation. Sixty boilers are in this boiler house at present.

In 1909 the first move was made toward the centralization of power. Upon final completion steam and power will be furnished to the entire Amoskeag company from three main boiler houses; one at the south end of the plant containing 59 boilers, one in the west central part containing 60 boilers, and one in the north end containing 64 boilers, all of 1,500 square feet of heating surface. Later on, one of these plants will be remodeled into a modern station containing large watertube boilers with up-to-date equipment. This will eliminate considerable labor as well as give us better operating economy due to higher pressures and temperatures.

All three of these boiler houses were originally designed for coal operation. Each boiler is fitted with an automatic underfeed stoker with forced-draft equipment, the stoker and forced-draft fan speed being controlled from the steam pressure. In connection with these stokers and the use of coal it might be pointed out that the regular dead plates formerly installed have been changed.

We, like a good many others, obtained very poor grades of coal during the late war, some of which was soft coal, but the larger portion was hard coal screenings and culm. Before burning it at all with any degree of success, it was necessary to do considerable experimenting. If the mixture was right it could be burned, but with our method of handling and receiving it, this was impossible. At times we were burning



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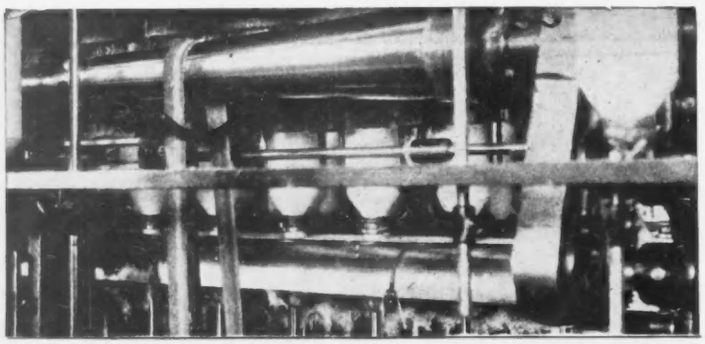

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Goodyear Cord Cone Belts do not break or stretch. They hold the cones and the pulleys in a flexible, slipless grip. Their efficient, economical service is a result of correct design and construction.

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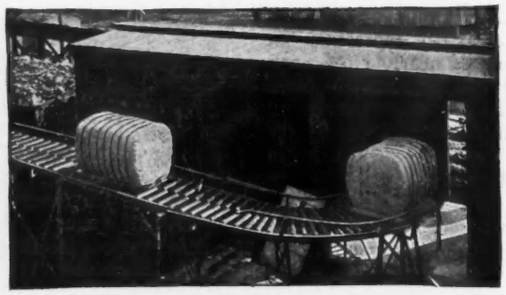

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In Textile Mills and Processing Plants, after careful consideration of their individual requirements, we have installed Mathews Gravity Conveyors that have solved material handling problems and have reduced costs.

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One blow of the hammer and the wedged shaped points are driven straight through the fibres of the belt without tearing them—a few more taps and the lacing is clinched so that it lays almost as flat and smooth as the belt itself.

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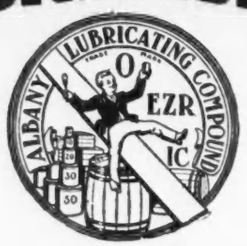

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708-710 Washington Street, New York

practically all hard coal screenings. After several experiments were made, the dead plates were changed over into a form of pinhole grates in order to get a better diffusion of air. These dead plates have been left in this form, and we are of the opinion that even with soft coal better efficiency is obtained.

Arrangement of North Division

The 64 boilers in the north division boiler house are arranged in one row and are equipped with economizers. Each boiler delivers its steam into a common header which is 20 inches in diameter at the turbine delivery end. This header is approximately 500 feet in length having an expansion of about 14 inches. It is carried in rolls placed on wall brackets.

Formerly, one 20-inch line ran the entire length of this building with another 20-inch line paralleling this for about two-thirds the length. These were hung on chains supported from the overhead girders. One of these pipes developed a leak near the joint, and after making tests on several lengths it was found that specimens were brittle, the metal breaking like cast iron at the blow of a small hammer. After this investigation all the main piping both in the turbine and boiler rooms was replaced. Expansion joints in the line take up the expansion, and anchors are placed at various places to divide the expansion.

Equipped for Oil Burning

About two years ago it was decided to equip this boiler house for oil burning. Various experiments were made with different burners and oil equipment, and it was finally decided to install mechanical atomization. Two steel storage tanks were erected on an island in the river, each having a capacity of 55,000 barrels. These were each surrounded by a separate dike, each dike having a capacity of one and one-half times that of the tank. Pipe connections are made with flexible metallic hose to the tank cars, and the oil flows by gravity through a 10-inch line to the suction of a 1,000 gallon duplex-type steam-driven oil sludge pump. This discharges the oil to either main storage tank on the island, and 24 tank cars can be unloaded in a nine-hour day.

The burner pumps discharge the oil through either of two 5-pass oil heaters, then through 20-mesh strainers into the burners at the boilers. The oil pressure at the burners averages about 200 pounds, and the oil temperature from 200 to 250 degrees F. These burners are so arranged that a certain amount of oil can be bypassed and returned to the burner-pump suction, the amount depending on the boiler load carried. The burner piping is so arranged that the load can be varied on one, 8, 16, 32 or 64 boilers through the operation of one return valve.

With this oil installation 14,000 K.W. load can be carried easily on the turbines. Each burner tip was designed to give not over 450 pounds of oil at 225 pounds pressure and 250 degrees F. The idea of the oil installation was not to overload the boilers, but to carry about the maximum load that was carried when burning coal. With coal the boiler room had a complement of 61 men. Today with all the boilers operating, 12 operate the plant or a saving of 49 men. Little trouble has been experienced with the oil installation from its design or operation. When running at a maximum load about 5,400 barrels of oil per week are burned.

Central and South Divisions

The 60 boilers in the central division boiler house are arranged in batteries of four in the main house. There are 29 boilers on the west side of the house arranged in 7 batteries of 4 boilers each with one additional fitted with a Dutch oven which is used in burning refuse. There are 19 boilers on the east side of the main house, and in a wing at right angles to the main house are 12 boilers used mostly for supplying steam to a vertical cross-compound condensing engine. There are no economizers in connection with this plant. A great number of returns close to the boiler house are brought back as well as considerable exhaust steam used for feed-water heating. This gives a good feed-water temperature. The returns at a further distance are carried to central points and here used in manufacturing process work.

There are 59 boilers in the south division boiler house arranged in 5 batteries of 10 vertical boilers with one battery of 9. These boilers deliver steam into two 18-inch headers which furnish steam for manufacturing purposes. Twenty-two of the boilers are so arranged that they can furnish steam to the turbine headers for use in the two turbines at this plant. There are no economizers in connection with these boilers. This boiler house is used mainly in connection with the woolen department, requiring considerable night work. An average of 225,000 pounds of steam per hour during the day is delivered, and approximately 1,100 tons of fuel per week is burned.

The First Steam Engine

The first engine was installed by this corporation about 1872. This unit consisted of a pair of 30 x 77-inch simple horizontal condensing engines rated at 1,000 h.p. and driving a jack-shaft through gearing from the main flywheel. This engine was used for general power and to relay the water power. Since that time 15 engines ranging in size from 150 to 4,000 h.p. have been added. These have gradually given place to the electric drive until today there is in operation one 34 x 66 x 48 vertical cross-compound condensing engine rated at approximately 4,000 h.p. at 120 r.p.m. This is direct connected to a 2,500 K.W. generator which feeds into the general power system. Another 34 x 60 x 72 horizontal cross-compound condensing engine operates at times. Both of these engines are used only in case of low water.

One pair of 38 x 48 simple, non-

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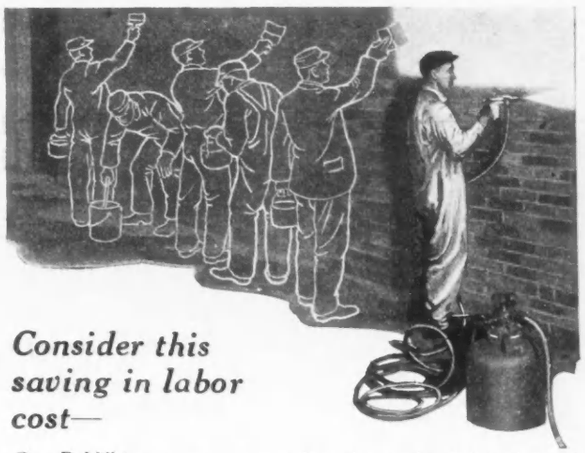

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One DeVilbiss spray operator does the work of 4 to 5 hand-brushers. This is the average economy you are able to effect in painting your mill interior, its outside walls and village homes with the DeVilbiss Spray-painting System.

Additional advantages are: a more thorough and uniform coating; a coating with the hiding power of two brushed coats; less scaffolding; no spattering and dripping of paint; less interference with mill operation.

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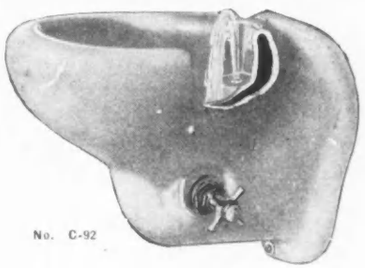

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The water you provide may be pure and wholesome, but the method of dispensing it, may be a constant menace to your workers' health.

The "VERTICO-SLANT" FOUNTAIN prevents contamination of the drinking nozzle, as it is located at the bottom of recess, protected by a wall on three sides, making it impossible to touch it with the lips. It uses less water than the old style head and its angle permits filling a glass or cup as readily as from a faucet.

Provide your plant or office with R&S fountains, which are of the most modern types available and they cost no more than the old types.

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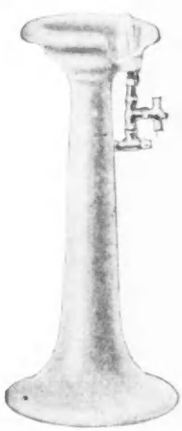

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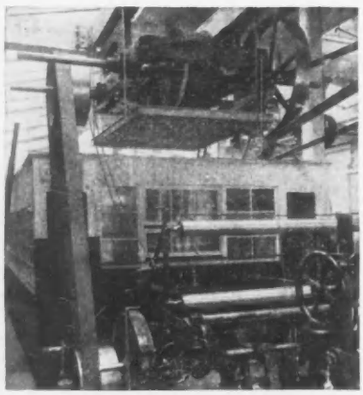

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Simply to get maximum production for different weights of cloth. For best results, each weight requires a certain definite speed and "THE REEVES" Transmission is the means for obtaining that speed. A turn of the hand wheel by an attendant easily and quickly obtains any speed desired. Any one speed may be maintained indefinitely or may be changed as often as necessary. The flow of power is positive and steady at all speeds.

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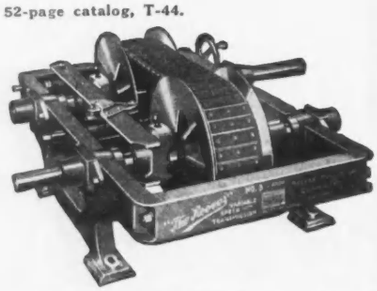

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THEY WILL SAVE YOU MONEY

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A substantial and light truck for handling goods in the factory

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Best returnable shipping box made for shipping goods and delivering to branch factories, etc.

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As light as a basket but stronger and more durable for all purposes.

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Nest into each other when empty. Extensively used on chutes and conveyors in many large mills and wholesale houses.

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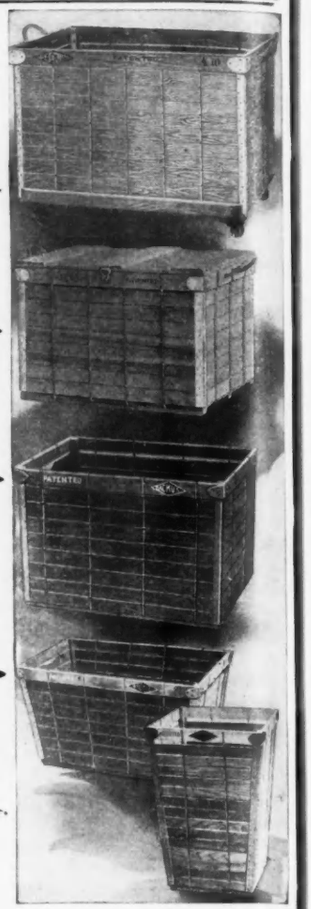
Used for receiving goods from machines for sorting and wherever a high basket is required.



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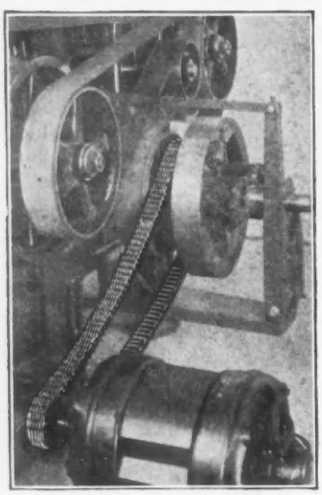

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Adaptability

The "Commercial" Annular Ball Bearing is adaptable to practically any load, speed and operating conditions. Engineers designing new models and new equipment should let us tell what we have for the work. If stock bearings will not answer, a special bearing will be built.

In various grades for different conditions. Inexpensive. For moderate radial and radial thrust loads at speeds under 3000 r.p.m.

Ask for catalog, discount sheet and samples.

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condensing engines installed in 1889 operate during the working day. These are rated at 1,800 h.p. at 78 r.p.m. They furnish exhaust steam at 15 lbs. (gauge) back pressure for general process and heating work in the central division. One horizontal cross-compound condensing engine is used at the present time in connection with the waterwheels, but is to be discontinued during the coming summer and replaced by an electric drive.

The First Steam Turbine

The first steam turbine was installed in 1907. It was a vertical machine operating condensing on steam at 160 lbs. This turbine was rated at 1,500 kw., but has run from 2,200 to 2,500 kw. and is used today only during low water periods or for emergency causes.

When the plant was erected in the north end of the yard in 1909, two 3,500 kw. horizontal steam turbines were installed. They were fitted with overload valves so that a maximum of 4,500 kw. on each could be generated. Each was connected to a barometric condenser taking its water from the dam, giving the condenser a small lift. Under these conditions no pumps of any kind are used for condensing purposes.

About 1910 a 5,000 kw. horizontal turbine was added to this station, connected to a condenser of the same type and working under the same conditions. The maximum output at this station is about 14,000. About 1916 a 3,000 kw. condensing turbine was installed in the south station in order to boost the line and to help out at this end of the yard. The load on these various turbines varies with the stream flow. With these machines a total of 19,000 kw. can be developed. With the engines now in use a grand total of 32,000 steam horsepower is available, leaving about 13,000 water horsepower to be developed when the plant is running full.

Using By-Product Steam

We believe that power can be developed in no cheaper way than by using by-product steam for manufacturing purposes. In order to accomplish this, a 5,000 kw. straight noncondensing steam turbine has just been purchased to be installed about December. This is to be used at the south division plant to furnish low pressure exhaust steam in the worsted department. All manufacturing and heating steam is to be passed through this machine (about 165,000 pounds per hour) and then used at 25 pounds (gauge) pressure instead of using high pressure steam as is now done. This will relieve the present boilers as well as create considerable saving, due to the fact that this load will replace some of the load now furnished from the high pressure condensing turbines.

After this is completed and has operated a sufficient time to prove its value, the installation of such a machine in the central part of the plant is contemplated, where there is used about 160,000 pounds of steam per hour for manufacturing and heating purposes. This steam can be passed through a non-condensing turbine and approximately 4,000 kw. obtained.

With these two machines operating together with the average hydraulic power, there would be obtained approximately 27,000 h.p., leaving about 12,000 kw. to be developed by high pressure turbines. As the flow of water was more or less, the steam power would vary accordingly. In connection with these non-condensing turbines it should be pointed out that the load on the machines will be entirely dependent on the exhaust steam demand, the turbine throttle being regulated by the back pressure. With this non-condensing installation coupled with the new contemplated high pressure boilers and the present hydro-electric plant, operation should be simple and economical.

All the generators now feed into the general electrical system, and the speed is regulated from the main steam generating plant. The total waterwheel horsepower that could be developed is about 18,000, the remaining power being obtained from steam generation. During the last ten years an average of about 140,000 tons of fuel per year has been burned, of which 50% was used for power.

About three years ago it was deemed advisable to erect a more up-to-date hydro-electric plant and to centralize the water power development, thus obtaining a higher efficiency with larger units and doing away with the great number of smaller waterwheels. The high price of fuel and the difficulty of obtaining it made it also desirable to obtain more power from the water. In the early part of 1919 work was started and was continued up to 1923, when two of the three 7,500 h.p. waterwheel units were started. These wheels are to be run as much as possible, shutting down the old wheels along the canal as the water gets low to provide water for the more efficient wheels at the new plant. Most of the older wheels will continue to run when there is surplus water available.

Business Literature

POLYPHASE INDUCTION MOTORS: Burke Electric Co., Erie, Pa.

This is a 12-page bulletin known as No. 128, covering polyphase induction motors, that have been developed especially to meet severe requirements and conditions encountered in locations where ruggedness and reliability are essential. A feature of these motors is that the stator frames correspond in most cases in overall dimensions, drillings for feet, etc., with the standard direct current motors and therefore the AC and DC motors can be frequently used interchangeably in applications to machine tools, elevators, cranes, hoists, pumps, etc. This is appreciated by machinery manufacturers and by mills and factories using both alternating and direct current. These motors can be adapted for suspension from side wall or ceiling by turning the bearing brackets. They can also be furnished vertical or back-geared.

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The Bradley Washfountain

The rapidly increasing demand for Bradley washfountains from textile mills and other industrial plants shows that this modern sanitary wash fixture is destined to replace the old methods for collective "wash-ups" just as the Bubbler Fountain has replaced the public drinking cup.

The Bradley Washfountain saves space, saves water, lessens repair and upkeep costs, facilitates quick "wash-up" in clear fresh running showers, and is appreciated by both management and employees. Each fountain has mixing device for hot and cold water conveniently located for adjustment.

Two sizes, 54-inch and 32-inch diameter for ten or six people

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BRADLEY WASHFOUNTAIN CO., Milwaukee, Wis.
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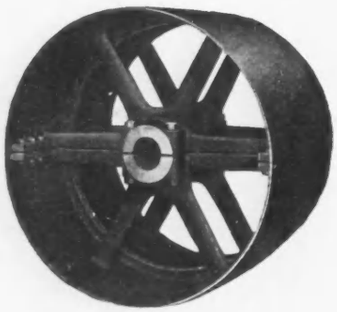

ALWAYS RELIABLE

No system of interchangeable bushings can obtain the permanent tightness and accuracy of running which is secured by a carefully finished pulley, bored to fit the shaft.

The minor advantages claimed for pulleys of light construction with separate bushings are greatly outweighed by the accuracy, dependability and permanently satisfactory results obtained by

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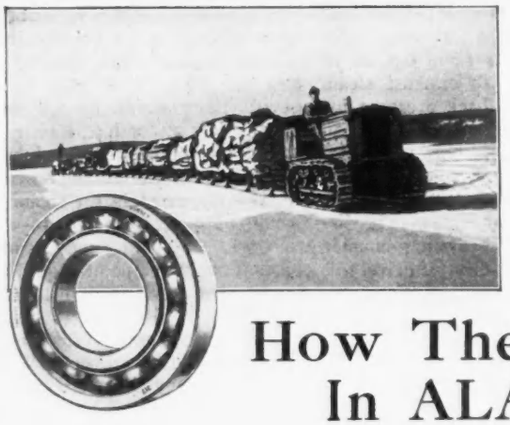

Mushing into Slate Creek Mine, Copper River District, Alaska, U. S. A.

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This Holt Caterpillar tractor, equipped with Gurney Bearings, is hauling a 70,000 pound load 140 miles up the ice-bound river to the Slate Creek Mine in the Copper River District, Alaska. Gurney bearings give reliable and efficient service under severe conditions.

Gurney engineers stand ready to assist you in the solution of your bearing problems.

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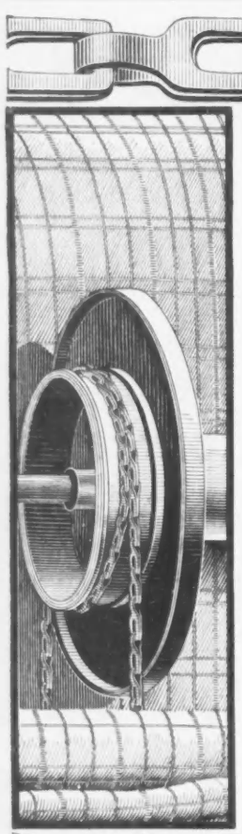
BALL BEARING



"American" and "Elwel" Loom Friction Chain

(also known as Friction Let-Off Chain) gives positive warp-beam tension on all weaving looms, and is stronger and more economical than bands, cord or rope.

The Chain is not affected by atmospheric conditions, and therefore will not stretch, rot, or take up. This eliminates the necessity of frequent adjustments and, as the friction surface is always the same, insures perfect and uniform weaving.

Made of the best steel obtainable, and assembled on automatic machines. Strength is uniform throughout. The weldless pattern shown above is the "American" Pattern. The electric welded pattern illustrated below is the "Elwel" Pattern.

Made in a full range of sizes for use on Cotton, Silk, Woolen, Carpet, Blanket, Duck, Shawl, Ribbon, Tapestry and all other Weaving Looms.

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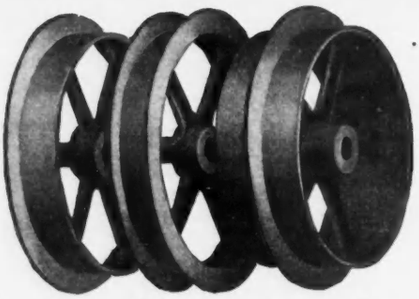
PULLEYS HANGERS

The T.B. WOOD SONS CO. Line



CLUTCHES COUPLINGS

Every Cotton Mill has use for some type of Flanged Pulley and we are prepared to furnish promptly, any type that you may need.

The T.B. WOOD SONS CO. Line of POWER TRANSMISSION MACHINERY, is the result of 63 years of studied experience upon this one line only. We offer you the benefit of that experience in the service of our Engineering Department which is yours for the asking.

T. B. Wood's Sons Co.
CHAMBERSBURG, PA.

POWER TRANSMITTING MACHINERY

NEW MACHINERY AND PROCESSES

Centrifugal Fan

A Reversible Housing—Standardization and Simplicity

By *Arthur L. Greene*

Interest attaches among those using ventilating or forced draft apparatus of any kind to a newly developed centrifugal ventilating fan, combining such features as interchangeability of parts, a self-contained bearing support and a system of rivetless construction for fan housings. This improved construction has been inaugurated by the Buffalo Forge Co., Buffalo, N. Y., in their well-known fans, the Niagara Conoidal, Turbo Conoidal, Duplex Conoidal and Steel Pressure Blowers, for all sizes from No. 2 to No. 6, inclusive, and for capacities up to 14,000 feet per minute.

This new fan, classified as the "Type H" fan and having a reversible housing has eliminated many features characteristic of the older type. In brief, these fans are adjustable for any discharge in any angle of a vertical plane, and in addition can be made for either a right or left hand as the particular installation may require at any one time. The features making this possible lie in the construction. The Type H fan is made of three easily assembled parts, as differentiated from the former one-piece construction.

As can be seen from Fig. 1, the fan housing consists of but two demountable side cover plates or standards and the shell. In one side is an unobstructed inlet, while the other supports the shaft and bearings. To change the hand of the fan it is only necessary to remove the assembly bolts connecting the standards with the shell, shift these cover plates, thereby reversing position of inlet and pulley, and rebolt. It is the claim of the manufacturers that such a proceedure can be completed with one of the smaller fans, such as a No. 3 or No. 4, in one hour's time.

For changing direction of discharge it is only necessary to loosen the assembly bolts in the ring of each side plate and take out two reinforcing bolts, then revolve the housing until the discharge points in the desired direction. These fans, generally speaking, are only reversible for three positions, no bottom horizontal being feasible because of the closeness of the bearing center to the floor. If this discharge is necessary, however, the base can be raised by putting it on a temporary platform of some kind, sufficient to allow clearance for swivelling the discharge to this position.

Closely allied but independent and unrelated as regards practical usage, is the so-called rivetless housing system. The method of construction is quite simple. The steel scroll sheet after being cut to size is stamped along the edges in a reversed U-shaped scarfing, while the two plates forming the side walls of the shell are punched with holes corresponding in size and spacing to the scarfing or projections on the edge of the scroll sheet. Assembling of the housing consists merely of fitting each side of the

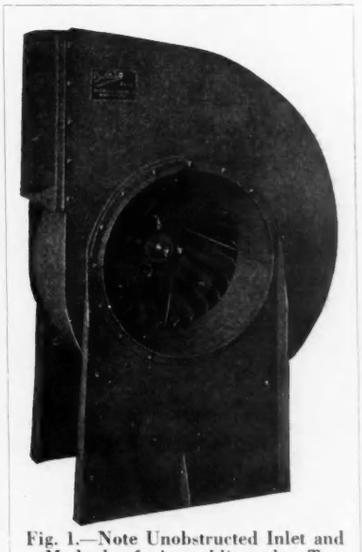


Fig. 1.—Note Unobstructed Inlet and Method of Assembling the Two Standards With the Shell by the Bolts Shown Around Inlet Opening

housing plates to the projections in the scroll plates, and then expanding these projecting edges to make a tight fitting union.

By use of this method all rivets are eliminated in assembling; the inside of the fan housing presents a perfectly smooth surface with no frictional points; the efficiency of the fan, through elimination of internal friction for the air and the making of a tighter fitting union at the joints, is increased; time of construction and assembling is reduced, and standardized production methods are insured

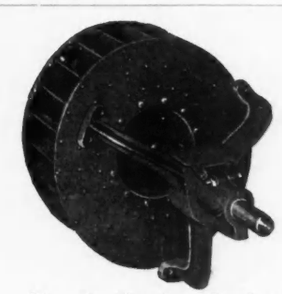


Fig. 2.—Showing Bracket Bearing Arrangement With Blast Wheel Without Casing, Split Bearing and Oil Ring Cover

in the cutting and laying out of plates.

Equally important in the development of the new so-called Type H fan has been the introduction of the tripod bearing bracket to take the place of the old and heavier cast iron bearing stand with a separate base. This bearing, as the name implies, is in the shape of a bracket with three arms of "T" section and is attached direct to the fan housing. A strap ⅜ inches by 1½ inches forms a binding band on the inside of the housing for the tripod and reinforces the sides.

This bearing, which is being used on all Type H fans of sizes No. 2 to No. 6, inclusive, consists of two split bearings bored and reamed, with bronze bushings inserted. These fans in addition are generally fitted with Type "D" wheels and take standard Type "D" capacity tables.

All shafts are ground and liners reamed to exact size. The bearings cast as one unit insure alignment, as much or more so than in the older type of bearing stand; the bearings are more accessible for repairs and inspection; the weight, in consequence of having less cumbersome casting, is considerably reduced; and important from the viewpoint of simplicity of construction is the fact that the tripod casting consists of but one piece, whereas in the older type the bearing stand is composed of eight separate castings and parts.

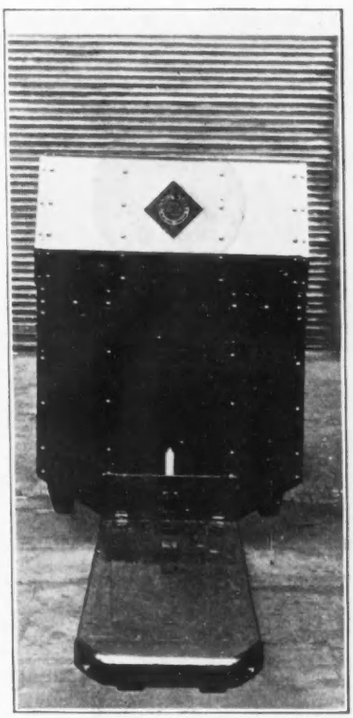
A desirable feature that is worthy of note lies in the combination of overhung pulley and wheel type effected, eliminating thereby the necessity of a bearing being placed in the inlet. The advantages of having no inlet bearing are obvious, particularly where a connection is used on the suction side of a fan. The overhung pulley feature makes for an advantage in changing pulley sizes.

These fans are essentially for pulley driven jobs, but they can be made for direct motor drive as well by placement of a sub-base for the motor and connecting it to the shaft by means of a flexible coupling. The tripod bearing has a large oil reservoir, a hinged cover plate over the oil ring and a drain plug and overflow opening with cover.

Low Type Lift Truck

Electric Unit for Use with Same Platforms as Hand-Lift Truck

A large number of mills and warehouses are using hand-lift trucks and separate load platforms. The economy of this system for storage and processing of goods has invariably proved satisfactory, and there has developed a demand for an easily operated power equipment. To meet this The Elwell-Parker Electric Co., Cleveland, Ohio, has brought out an electric haulage unit which may be used with the same platforms already employed in connection with the hand-lift type truck; that is, those which elevate the load by pushing down on the handle. The electric lift truck consists of a hot riveted steel frame, equipped with an electric motor driving 22 by 3½ inch rubber tired wheels through a worm reduction running in oil. The frame is suspended on springs over this drive axle. A compartment located immediately over the drive axle houses an electric



New Low Type Electric Lift Truck

storage battery of either the alkaline or lead type. This battery is of sufficient capacity to operate the truck all day long. The motor will drive the truck with a load up a 10% incline.

The axle beneath the truck platform is equipped with 5¾x4 inch wheels. The top of the movable platform of the truck is built of ¼-inch steel plate, 18 inches wide and 46 inches long, and clears the floor 6¼ inches when in its lowered position. When fully elevated it clears the floor 9¾ inches, that is, there is a 3½-inch lift. This truck platform is supported on three heavy steel links, pivoted on the truck frame. Each link is provided with a pressure-greased renewable bushing, assuring easy action and low upkeep where a great pressure exists due to weight of the 4,000 pound load to be transported.

The platform is raised or lowered by rocking and lifting simultaneously. In other words, the loaded skid is moved slightly toward the operator. When being loaded, therefore, it clears any obstruction located beyond the load which might interfere with the elevation of the load. The load

(*Continued on page* 111)

FIG. 27

LANE PATENT STEEL FRAME
CANVAS MILL TRUCK

One of the outstanding features of Lane Canvas Mill Trucks, and this applies also to all Lane Baskets, is the entire absence of any rough surfaces, or in fact, anything whatever to in any way injure the most delicate materials handled therein.

Comparison is invited between such a container and other types, which abound in splinters, projecting nails, rough, uneven surfaces, etc.

Consider also the durability of the Lane Canvas Truck, adapted as it is to withstand many years of service—because of the quality, strength and durability, which are built into it from the start.

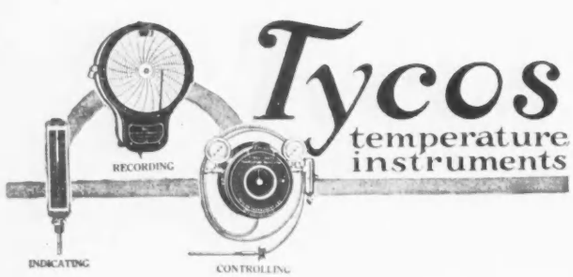
FIG. 1

Lane Stationary Frame Thread Guard Mill Truck Caster. Standard equipment on Lane Trucks.

FIG. 3

Lane Swivel Frame Ball Bearing Thread Guard Caster. Optional equipment on Lane Trucks.

W. T. LANE & BROTHERS—Manufacturers—POUGHKEEPSIE, N. Y.



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517 S. Dearborn St.
Chicago, Ill.

MILL NEWS

NEW MILLS

Cotton

*GLOVERSVILLE, N. Y. The new yarn mill to be started by E. Lloyd Collins at 10 Wilson street will employ about 15 hands at the beginning of operations. Mr. Collins was for several years connected with the Gloversville Knitting Co.

HEMP, N. C. The County Moore Mills, Inc., is the name selected for a new mill that has been in process of organization here for some time. W. W. Cowgil has been elected president of the company, J. R. McQueen, vice president, and Mr. Rowe, president of the Bank of Hemp, secretary and treasurer. Directors are W. W. Cowgil, J. R. McQueen, J. Madison Brown, S. G. Garner, and D. A. Blue. Two other directors are to be elected at a later meeting of the stockholders. It is planned to manufacture both yarns and cloth. Work has already begun on the site preparatory to building.

Knit

*LENOIR CITY, TENN. A company to be capitalized at $20,000 is being formed here by J. L. Hughes, former manager of the Taubel-Scott Co., and will establish a knitting mill for the production of silk ties, mufflers, etc. Most of the stock has already been subscribed, and the project is virtually assured.

Miscellaneous

*WORCESTER, MASS. The Worcester Spinning Corp., which was incorporated last May, is installing machinery for the first unit of its plant at 79 Beacon street, and expects to begin operations shortly. This was all purchased in the United States. Machinery to come from Europe has been contracted for and is expected to be set up in the plant early in November. The corporation will spin degummed rhea fibre into yarns.

ENLARGEMENTS AND IMPROVEMENTS

Cotton

MOBILE, ALA. The work of installing motors and lights in the cotton mill, recently purchased by the Cotton Mills Products Co. in Mobile, is being handled under the supervision of Lockwood, Greene & Co., engineers of Atlanta and Boston.

LOS ANGELES, CAL. The Los Angeles Cotton Mills, 628 Metropolitan Building, are having plans completed for the construction of a new plant unit on Valley boulevard, near the city limits, to consist of a one, two and three-story mill, 350 x 800 ft., brick and steel. All machinery will be electrically operated. M. H. Merrill & Co., 50 State street, Boston, Mass., are engineers.

BERRYTON, GA. The Berryton Mills are installing 12 additional cards and 12 spinning frames. Twenty-four new houses in the mill village have recently been completed.

*DALTON, GA. The American Thread Co. has acquired 540 acres of land at Dalton, Ga., about 30 miles south of Chattanooga, Tenn. The site includes the Dalton Country Club, a large lake as a natural supply of spring water flowing about two million gallons a day, a spur track which connects the property with the Southern R. R. and L. & N., while the main power lines of the Georgia Railway Light and Power Co. are within one-half mile. It is the intention of the owners to lay out the site for a complete development on a large scale and to proceed at once with the erection of a 30,000 spindle thread mill, together with a storehouse, boiler house and mill village. Other units will be added as occasion demands. The general location is ideal, being in the foothills of the mountains, a little out of the more congested Piedmont section, with splendid rail, power and water facilities. The detailed site lends itself to a large development. It is on the edge of Dalton, a thriving city of about 7,500 people, with all facilities for social life and recreation, which are often lacking in an isolated mill. It is the intention of the American Thread Co. to develop this property into an ideal southern textile manufacturing community. Lockwood, Greene & Co., engineers of Boston and Atlanta, have this complete development in hand for the owners.

BRUNSWICK, ME. The Cabot Mfg. Co. has had various improvements made to its plant and additional departments have been opened.

FALL RIVER, MASS. Small Bros. Mfg. Co. has awarded contract to A. H. Leeming for erecting an 84 x 90-ft. addition to its plant. It will be of brick and mill construction and cost $60,000.

*BISCO, N. C. Aileen Mills have awarded contract for 64, 90-inch looms for the production of sheeting.

CENTRAL FALLS, N. C. The Central Falls Mills, Inc., are building a dam near their plant here to develop hydro-electric power. It is expected that 400 h. p. will be developed. The power will be utilized by the Central Falls mill. The new plant will cost approximately $150,000.

*DUKE, N. C. The Erwin Cotton Mills Co. has awarded contract for the construction of a plant in Duke which will house approximately 35,000 spindles, to J. L. Crouse of Greensboro, N. C. J. E. Sirrine & Co., Greenville, S. C., are the engineers in charge.

*MOORESVILLE, N. C. Cascade Mills, Inc., have awarded contract for the construction of a new weave shed and an extension to the old Dixie mill, to the Grier-Lawrence Construction Co., Statesville, N. C., for $57,000. The weave shed will be 134 x 161 ft., one story, and the extension 60 x 100 ft., two stories high. Lockwood, Greene & Co., Charlotte, N. C., are the engineers in charge.

ROCKINGHAM, N. C. Hannah Pickett Mills have awarded a contract to the T. C. Thompson Co. to build 24 four-room cottages in the mill village. An addition, doubling the spindleage of the plant, has recently been completed.

RUTHERFORDTON, N. C. The Cleghorn Mills have installed four new twister frames. These take the place of old machinery.

TARBORO, N. C. The Fountain Cotton Mills have awarded contract for 25 new houses for operatives to D. H. Harris & Son.

*SCRANTON, PA. The Scranton Lace Co. is rushing work to completion on the one-story addition to its plant on Meylert street.

GRANITEVILLE, S. C. The Graniteville Mfg. Co. has asked bids for the construction of a dye house and finishing plant. The addition will be 371 x 124 ft., one-story and part basement of reinforced concrete, daylight construction.

Wool

NEW LONDON, CONN. Edward Bloom Co., manufacturers of silks, are now receiving their first shipment of worsted spinning machinery from Hall & Stells, Ltd., Keighley, England, which was purchased through Edward Jefferson, Philadelphia, American agents for this firm. This equipment is to be installed in the new worsted spinning department to be established at this plant.

ROCKVILLE, CONN. The Hockanum Co. has purchased a plant adjoining its American Mills and plans to operate same.

FRANKLIN, MASS. The Clover Worsted Mills have had three new boilers installed.

*HINSDALE, MASS. Repairs are progressing at the Hinsdale Woolen Mills, but no date has been announced for the reopening by the new owner, Francis H. Holmes, of New York. Foundations are being put in for a new engine and boiler. The wooden structure, formerly used as a finishing room, will not be used, as this department will be located in the main mill.

OXFORD, MASS. The Bernon Mill of David N. Taft shut down on Sept. 29, for two weeks during which time a new boiler will be installed and extensive repairs made in the boiler room. Machinery will also be installed in the new weave shed during the shut down. The new 80-foot brick chimney has been completed.

*WORCESTER, MASS. The Geo. E. Duffy Mfg. Co. has completed the new dye house, mention of which was made some time ago.

WORCESTER, MASS. Philip M. Pfaffmann has recently had two mules, two looms, one shear and a washer added to the equipment of his plant.

*JACKSON, MICH. The Felters Co. has commenced operations at its new local plant at Michigan Center, near Jackson, giving employment to about 30 operatives. It is expected to increase the working force to 75 persons at an early date. The company will furnish large quantities of felt to the Fisher Body Corp. and the Wilson Body Co., manufacturers of automobile bodies.

Knit

*BARNESVILLE, GA. The Carter-Collier Co. has ordered 15 new knitting machines for the Barnesville plant.

LAFAYETTE, GA. The Walker County Hosiery Mills are constructing a 40 x 60-ft. warehouse.

PHILADELPHIA, PA. The Harris Knitting Mills, Germantown, have awarded a contract to William J. Gruhler & Co., 219 High street, for alterations in their plant.

Silk

*ALLINGTOWN, CONN. The Velvet Textile Corp. will commence the construction of a one-story and basement addition to its local plant, for which a general contract recently was awarded to Hewlett Co., Bridgeport, Conn. Smith & Richmond, New Haven, Conn., are architects.

MIDDLETOWN, CONN. The Middletown Silk Co. has awarded contract to the Berlin Construction Co. and O'Brien Bros. for a two-story mill building, 60 x 230 ft. The new plant, which will have 35,000 sq. ft. of floor space, will be erected at North Main and Johnson streets.

*PHILADELPHIA, PA. The Viscose Co., whose main office and plant is in Marcus Hook, Pa., has entered into contract with the city to pump dredgings from the Delaware and Schuylkill rivers on its property along the first noted stream, until the level reaches about 4 ft. above high water, reclaiming lands to be used in connection with its proposed new plant at this point.

Miscellaneous

WEST POINT, GA. The Lanett Bleachery & Dye Works are to build an extension to their present plant, which will more than double its capacity. Gallivan Building Co. of Greenville, S. C., has been awarded the contract for the construction work. It is understood that the building and equipment will entail an expenditure of nearly one million dollars.

PHILADELPHIA, PA. Firth & Foster Co., Emeral and York streets, dyers and finishers, have awarded contract for alterations to their plant to Wilson Ruff Co., Franklin Trust Building.

FIRES

NEW BEDFORD, MASS. Fire starting in the picker room of the New Bedford Cordage Co., last Monday, was confined to the third floor of the plant, due to prompt action on the part of employes who fought the blaze until the arrival of the city fire department.

WOBURN, MASS. The Tribble Cordage Mills, Inc., had a part of their local plant destroyed by fire on Sept. 25, with loss estimated at $100,000, including buildings, equipment and stock. They plan to rebuild.

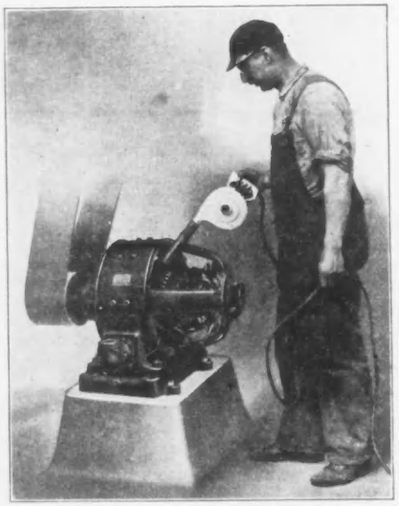
LONDON, ONT., CAN. The Campbell Hosiery Co., 19 King street, suffered a fire loss exceeding $15,000 recently.

FACT AND GOSSIP

OPELIKA, ALA. The office of Wehadkee Yarn Mills has been moved from Talladega, Ala., to the office of the Opelika Mfg. Co. The plant of Wehadkee Yarn Mills is at Rock Mills, Ala. W. S. Freeman, general manager of Opelika Mfg. Co., is treasurer and general manager of Wehadkee Yarn Mills. Mr. Freeman was formerly vice president and general manager of Samoset Cotton Mills at Talladega.

TROY, ALA. At a recent meeting of the local Chamber of Commerce, a reso-

*Indicates previous mention of project.



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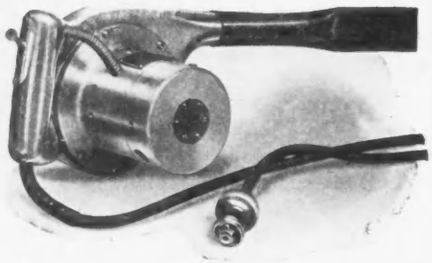

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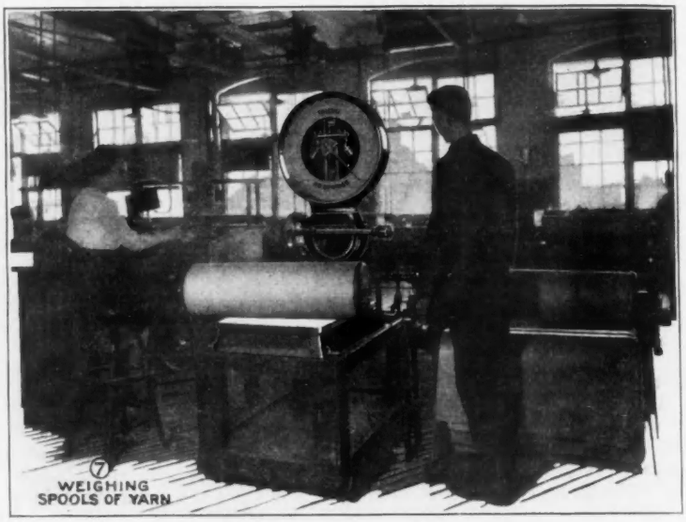

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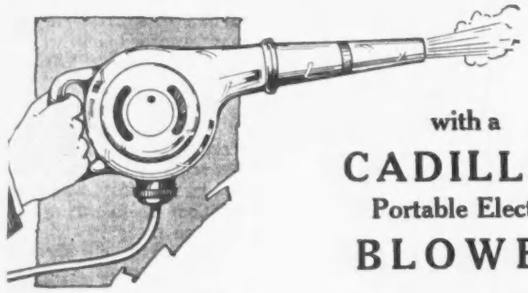

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Reduce depreciation on your machinery by keeping it clean and fit.

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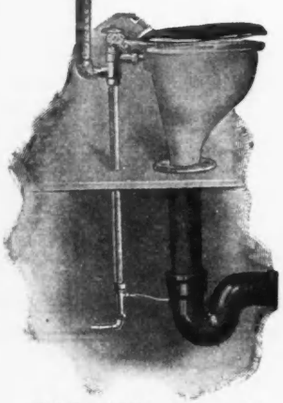

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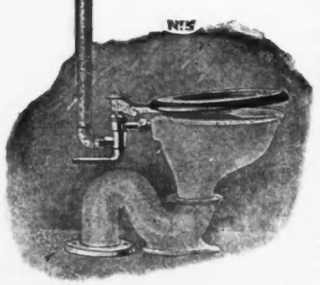
Has the simplest and most durable valve ever put on *a water closet.*



JOSEPH A. VOGEL CO.
WILMINGTON, DEL.

Mill News—Continued

lution was adopted advocating the establishment of a new textile plant in Troy and immediate efforts to secure such a plant will be made by the Chamber.

TUCSON, ARIZ. According to a report, a 10,000 spindle mill will probably be erected here by Texas interests.

CAMDEN, ARK. J. T. Roundtree, Jr., of Paris, Tex., has been in Camden conferring with the Industrial Committee of the local Chamber of Commerce relative to the establishment of a million dollar mill here. The committee gave Mr. Roundtree a written agreement that Camden will raise $100,000 toward the project as soon as the Eastern textile mill, which he expects to interest, accepts the offer of this city.

WASHINGTON, D. C. F. E. Taylor, 607 Florida avenue, N. E., is contemplating the purchase of equipment for the manufacture of hosiery with the intention of entering into this business. Circular machines with attachments for mock seams and fashion marks will probably be bought.

CARUTHERSVILLE, MO. The citizens of this town are contemplating the organization of a cotton mill to manufacture light duck and cotton pick sacks on a small scale. A. T. Neifind is one of the interested parties.

PATERSON, N. J. The Belfry Silk Co., 24½ Van Houten street, was incorporated recently with capital of $100,000. Incorporators are Abraham Belzor, 116 Fulton Place, Katherine Garken, 716 Twenty-seventh street, and Annie Friedman, 689 Twenty-fourth street.

TENAFLY, N. J. The Tenafly Weavers, Inc., has been formed under state laws to operate a local mill for the manufacture of silks. Richard B. Scrandett, Jr., and Oswald L. Johnston head the company. Winifred Mitchell, Groff Building, is representative.

UNION HILL, N. J. J. J. Sussmuth, Inc., has been organized under state laws to take over and expand the local silk mill on Union street now operated under the name of J. J. Sussmuth. The incorporators of the new company are Carl Mohr, Robert H. Patterson and Edmund Kohl.

HENDERSON, N. C. It is reported that a company has been organized to erect a new cotton mill here. Construction is expected to start this Fall.

HIGH POINT, N. C. The Adams-Millis Co. was granted a charter last week by the secretary of state to operate a hosiery mill at this place. The authorized capital is $100,000, of which $10,000 has been subscribed by J. H. Adams, J. E. Millis and E. F. Redding.

MONROE, N. C. The Monroe-Jackson-Standard Cotton Mills, here, have been bought by the Manetta Mills of Lando, S. C., and have begun operation after having been idle for many months. The property has changed hands several times within the last year or two, and has been idle while going eratives are filling up rapidly and the new owners expect to operate the mill on full time on the manufacture of wide sheetings and probably bed spreads. The plant is also equipped for making high grade blankets. The name of the mill has been changed to Monroe-Manetta Cotton Mills, with the following officers: H. B. Heath of Charlotte, president; R. A. Willis, of Edgemoor, S. C., general manager and treasurer; David R. Harriman, Sr., superintendent.

SHELBY, N. C. It is reported that another cotton mill is to be built here soon. Charles Haynes and Maurice Hendrick of Cliffside, and O. M. Gardner and O. M. Shull of Shelby, have bought a large tract of land on the railroad tracks near here, and while none of the purchasers will talk about the purpose in view, it is understood that plans for a new mill are being considered for the site.

GREAT BEND, PA. The Hamada Silk Co., Inc., formerly of Binghamton, N. Y., has taken over the plant of the Rossville Silk Mills Co. in Great Bend, Pa., and has moved its office and business to that place.

PHILADELPHIA, PA. The Beswick & Clay Co., Inc., expects to have the new plant at Greenway avenue and Sixty-eighth street ready for operation about Nov. 1. Equipment will be transferred from the mill on Callowhill street as the city has taken over this property for parkway purposes.

PHILADELPHIA, PA. Announcement is made that the partnership between Charles A. Scholl and Louis T. Cohn, trading as the Scholl Knitting Co., 3648 N. Lawrence St., women's 200 needle seamless hosiery, has been dissolved by mutual consent. Chas. A. Scholl has withdrawn his interest and the business will be continued by Louis T. Cohn.

NORRISTOWN, PA. Wages of employes in local woolen mills have been advanced five per cent, including workers at the plants of the Woodstock Woolen Co., Inc., Norristown Woolen Co., Henry F. Scatchard Mfg. Co., and the George W. Watt Woolen Co.

PAWTUCKET, R. I. The American Hair Cloth Co.'s mill has been sold to the Salisbury Co., tag manufacturers of this city.

LAURENS, S. C. Laurens Cotton Mills have purchased 30 acres of land adjoining their present property and rumors are that additions will be made. The company recently awarded contract for building 20 frame bungalows for operatives. The plant is operating 44,832 ring spindles and 1,184 looms on the production of dimities and fancy shirtings.

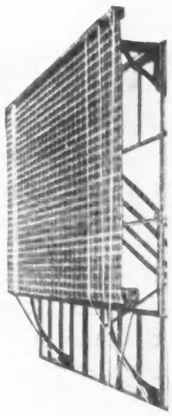
*CHATTANOOGA, TENN. Operations at the Dixie Spinning Mills began last week, when the first completed yarn was turned out. The product will be mercerized by the Dixie Mercerizing Co., which is controlled by the same interests.

BOWIE, TEX. The Bowie Chamber of Commerce is considering a plan to erect a cotton mill here. A committee has been appointed to make a study and report of the cotton mill situation and to confer with L. W. Robert, engineer, of Atlanta, Ga., who will visit the town within the next month.

EL PASO, TEX. El Paso is being seriously considered by a Connecticut manufacturer as a site for a $1,000,000 woolen mill, according to a recent announcement made by Leslie Reed of this city.

SEATTLE, WASH. The local Chamber of Commerce approved the offer of J. S. Mack of Allentown, Pa., to establish a silk mill in Seattle and extended him an urgent invitation to visit the city and acquaint citizens with his proposition.

Indicates previous mention of project.



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Eighteen years ago The Standard Alcohol Company built a wood alcohol plant at Fullerton, La. They then built five big storage tanks of CALIFORNIA REDWOOD, each holding about 30,000 gallons. These tanks have been in constant use for eighteen years.

The company is now dismantling its plant at Fullerton and moving it to Cuba, where they will re-enter business. The big Redwood tanks were taken apart and found to be in an absolutely perfect state of preservation, so the company is shipping them knock-down to Cuba, where they will again be put together and used.

When eighteen year old tank stock is so good that it is worth freight to Cuba, it is some record for tank material.

—*Gulf Coast Lumberman, Issue Feb. 1st, 1923*

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New Machinery and Processes—Continued

(*Continued from page* 105)

is lifted by means of an arm or screw ram attached to the rear of this rocking platform between two of the supporting links. The other end of the ram is drawn into a threaded nut which is in fact the hub of a bronze worm wheel, which in turn is driven by a steel worm directly splined onto the armature shaft of a second motor which receives power from the battery mentioned before.

To pick up a loaded skid, the operator drives the narrow truck platform of his truck beneath it, closes an electric switch, whereupon the motor actuates the mechanism which lifts the load 3½ inches in 10 seconds, stopping automatically when it has reached full height. The platform may be stopped manually at any intermediate point. The load is driven to its destination and electrically lowered at the spot where wanted, and the truck is free for a repeat operation.

Flexibility is an essential characteristic of this tool, for in many factories the aisles have been laid out to accommodate the hand-lift truck. All four wheels are steerable. The large rubber tired drive wheels are claimed to decrease the wear of the floor, even with the added weight of the truck itself.

This unit is intended primarily to extend the hand-lift system. It may be used to carry a load and at the same time trail a load on a hand-lift truck. It is stated that it will carry a 4,000 pound load at a speed of 300 to 400 feet per minute.

RECENT TEXTILE PATENTS

BRAIDING machines, Stop motion for. 1,467,551. F. W. Mansfield, Canton, Mass.

DRYING and conditional materials, Method and apparatus. 1,467,306. W. H. Carrier, Essex Falls, N. J.

FABRICS, Seam for. 1,467,626. H. L. Tucker, Winchendon, Mass.

KNITTING machines, Web holder mechanism for. 1,467,691. R. W. Scott, Babylon, N. Y.

SPINNING machine. 1,467,457. D. M. Sullivan and G. W. Baity, Greensboro, N. C.

STOCKINGS, Making. 1,467,549. R. H. Lawson, Central Falls, R. I.

THREAD guide, Tension. 1,467,443. A. A. Merritt, Worcester, Mass.

WARP holder. 1,467,697. O. and G. Tandler, Crimmitschau, Germany.

WEFT carrier magazine. 1,467,653. E. H. Ryon, Waltham, Mass.

Injury from Leafworm

WASHINGTON, D. C.—The cotton leafworm appeared about two weeks earlier than usual throughout the northern part of the cotton zone, while on the other hand the cotton crop was about 10 days late in its development, reports the Bureau of Entomology of the Department of Agriculture. Owing to these conditions rather serious injury by the puncturing of the bolls is reported from the greater part of the upper cotton zone.

Activity of Wool Machinery

Government Report for August Shows Falling Off From July

The Department of Commerce, Washington, D. C., has announced the following information with regard to active and idle wool machinery for August, 1923, based on reports received from 951 manufacturers, operating 1,123 mills. These do not include the data for the Daniel Boone Woolen Mills, Chicago, Ill.; John & James Dobson, Inc., Philadelphia, Pa.; Faulkner & Colony Mfg. Co., Keene, N. H.; Merrill Woolen Mills, Merrill, Wis.; or Sheble & Kemp, Philadelphia, Pa.

Looms

Of the total number of looms wider than 50-inch reed space, 47,714, or 76.9% were in operation for some part of August, 1923, and 14,296 were idle throughout the month. Active machine-hours reported for wide looms for August, formed 76.3% of the single-shift capacity, compared with 80.7% for the month of July, 1923, and 63.6% in August, 1922.

Of the total number of looms of 50-inch reed space or less covered by the August reports, 14,020, or 80.9%, were in operation, and 3,320 were idle. Active machine-hours represented 63.8% of single-shift capacity, against 73.8% in the preceding month and 58.3% in August, 1922.

The number of carpet and rug looms reported for August was 9,043, of which 7,706 or 85.2% were in operation for some part of the month, and 1,337 were idle. Active machine-hours represented 79.9% of the single-shift capacity, compared with 74.1% in July, 1923, and 76.8% in August, 1922.

Spinning Spindles

Of the total number of woolen spindles reported 1,931,785, or 84.1%, were in operation for some part of the month, and 365,277 were idle. Active woolen-spindle hours represented 89.0% of single-shift capacity, compared with 90.3% in July, 1923, and with 86.2% in August, 1922.

The number of worsted spindles in operation during August, 1923, was 2,171,787 or 84.5% of the total, and the number idle was 398,500. Active worsted-spindle hours were equal to 81.5% of single-shift capacity, compared with 89.7% the previous month, and 71.4% in August, 1922.

Cards and Combs

Of the total number of sets of cards reported 6,107, or 87.1%, were in operation some time during August, while 901 were idle. Active machine hours were equal to 93.2% of single-shift capacity, compared with 94.2% in July and 88.8% in August, 1922.

Of the combs reported for August, 1923, 2,029, or 77.1% were in operation, and 604 were idle. Active machine hours were equal to 84.4% of single-shift capacity; compared with 97.2% in July, 1923, and 85.5% in August, 1922.

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TECHNICAL SECTION

Ninety-five Per Cent. Yarn from Top

A Discussion of Methods in Worsted Drawing and Spinning That Reduce the Amount of Waste Made—Poor Policy to Spin Further Than Quality of Material—Arrangement of Machinery to Make Operatives' Work More Effective—Saving Waste Sliver

By *Toller*

WASTE saved is profit—all profit—and is worth six to ten times a like amount of new business. There are platitudes innumerable about the bane of waste, yet we allow about 8 to 10% between top and yarn in worsted spinning.

In converting from the thick, rope-like sliver to the thread known as yarn, a task entailing the use of from 8 to 11 processes, waste cannot be entirely eliminated, but in many cases it can be reduced. The waste percentage is increased when skilful and dexterous workers are replaced by those to whom the work is new. Long connection with the manufacture of wool has taught us how to make good, how to manipulate and to extract from wool a value far above that which the wool growers know.

Lack of Invention

It is interesting to recall that the wool grower has practically doubled the weight of his individual fleeces, and has induced the sheep to grow two fibres where formerly there was one. It is also equally instructive to learn that by mechanical genius the length spun out of a given weight of wool is 50% more than in former days. This latter improvement has been known for a generation. What is the present generation doing to prove that it is not sterile?

Apart from self-doffers for spinning and roving frames, no great change has been made in worsted yarn spinning machinery. The attention of the trade during this period has been directed to two important questions. These are: Increasing the production of the machines without changing the principle of working, and decreasing the waste percentage by organization and skill in setting. Both problems have been well studied and worthwhile results have been obtained, but no chronicler has been engaged in making records of how, where, and when progress has been made.

The work has been carried out by individuals within their own mills, and secrecy has been maintained so far as possible when improved methods have been found. Because some firms do not appear to have begun the real scientific work of reducing waste made, their attention is called to the following suggestions.

Spinning Beyond Quality

We are reminded, however, that an impossible task is often set the spinner, and that is the making of fine yarns out of defective wools. A story is told of a Yorkshire mill manager, who, dissatisfied with the spinning of a lot in one of the rooms under his charge, spoke sharply to the overseer regarding it. The latter had used all his ability, but could not produce a satisfactory spin at the counts required. He stated that the material had been spoiled before reaching him, and when asked by the manager to show him where, he took him to the first gill box in the drawing processes and pointed to the blend of tops feeding the machine.

To spin further than the quality of the material is productive of work and waste, and is often false economy. It should be stated that the spinning quality of a wool is never exactly known until spinning takes place. An approximate count limit can be given by the wool buyer or top blender, but appearances are often deceitful, and what promises to be a good spin while making up the blend may prove a disappointingly lean spin in the spinning.

There are makers up of top blends who are careful to allow no more "quality" than is requisite for making any count of yarn. A blend which spins well is altered by substituting good tops with cheaper, until only a moderate or poor spin results. It would be interesting to know whether "top is weighed against yarn," and if so whether the saving in cost of tops has more than balanced the extra work imposed, the loss by extra waste, and the lowered value of the finished yarn.

To reduce the amount of waste made, and to make up blends at a reasonable cost, while still maintaining the standard, necessitate the co-operation of blender, manager, and overseer, each supporting the others' efforts to produce the best from each lot worked.

Arrangement of Machinery

The arrangement of machinery may be considered from three aspects, each bearing directly or indirectly on the amount of waste made. (1) In processes such as worsted drawing the placing in sequential order is often considered paramount in importance. (2) Machines are sometimes arranged to accommodate power transmission routes. This is wrong in principle; machines are more economically set when their observation gives the minimum of fatigue to the minders. (3) To present a fine appearance as a whole, making of aisles with all machines fronting them, or in some other arrangement, without regard being paid to the question of minding them.

Mirrors Help Machine Tenders

A "share" of machinery may be so arranged that the minder cannot see the whole of her work from any position, but must move from place to place constantly to do the work efficiently, which movement increases fatigue. Mirrors placed in such positions as to reflect the front of one or more machines to a center convenient for the minder to watch could often be introduced with advantage. They would certainly economize the motion of the employes and by reason of the work being always in view would result in less waste being made.

Improvements introduced for assisting special materials are not always a success with all fibres. Brushes fixed to be in contact with top rollers to keep them clear from accumulated fibres may have been a success for some wools. Many men have condemned them because while keeping the rollers clear they have increased the amount of brush waste made. The more waste removed the more has stuck to the roller; and it will have been discovered that top roller brush waste contains some of the best and finest fibres. Brushes on the top rollers are only occasionally an advantage.

Again, iron tumblers may be advisable for short, slippery materials, but when used for good length wool they cause nicked rollers, which if not detected and removed are responsible for bad work and a large amount of waste. The same evil sometimes occurs in the use of wood tumblers placed too near the front rollers.

Nicked Rollers

Whenever nicked rollors are found, the following should be kept in mind: (1) The state of the twist in the feeding sliver should be tested; it may be too hard twisted and resist easy drafting. (2) The carriers and perhaps the back rollers should be opened out to give freedom to the fibres under draft. (3) The traverse motion should be examined and the length of traverse or "pick" made equal to three-fourths the width of front rollers and adjusted so that there is no "dwell" at the reversing of the traverse.

Machines Should Suit Work

Machines should be employed on classes of work suitable to their build. The waste amount is often increased by putting botany wool into a drawing set made for long English wool. To make up for the slow running speed of fallers in the gill boxes, and to maintain production, botany slivers too thick are run through, with the accompanying evils of badly drawn slivers being produced.

For mills whose trade varies, or mills which have periods when all short wool is spun, and periods when long wool only is worked, accommodating gill boxes should be used; that is, gill boxes in which the faller screws, fallers and rollers are interchangeable, one set being specially fitted for botany wool and fine cross-breds, and the other set for longer wools.

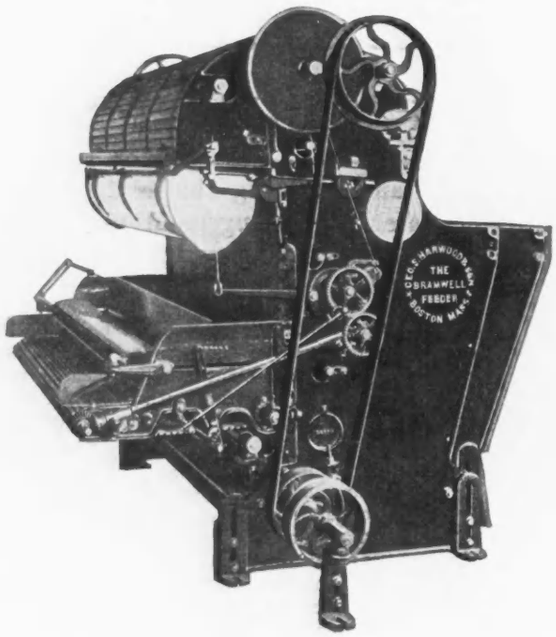
In well managed mills the question of length of material in cans or upon bobbins has received careful consideration with a view to obtaining and using the maximum capacity of each. The fewer piecings made, the less the attention required and the smaller the amount of waste made. We have seen new machinery installed with finisher boxes for not less than 100 dram sliver (40 yards) and size of bobbin 12 x 6. The size of bobbins should have been at least 14 x 8, which have more than double the capacity of the 12 x 6 bobbins.

System for Large Lots

In sets of drawing where each machine is fitted with a knock-off motion, sets of bobbins are placed in each machine on what is termed the "universal" system, and it is claimed that less waste results by so doing. In this system, which can only be adopted advantageously where large weights are put through, a number of doffings, each containing the same length, are made from one set of bobbins.

By way of example, a finisher box is fed two ends up from 12 x 6 bobbins which contain 4½ lbs. each, or 9 lbs. for both. This is sufficient to fill four 10 x 5 bobbins with 2¼ lbs. each. With a knock-off motion to adjust this weight on each doffing, the set feeding the box should run out when the fourth doffing is full. The set behind is allowed to run out (care being taken to prevent "small" or single end being made) and a new set is begun on empty bobbins.

These 10 x 5 bobbins are then taken to the reducer box and fed two ends up to fill 8 x 4 bobbins, with 18 oz. per bobbin. The 4½ lbs. contained on two 10 x 5 bobbins is sufficient to



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53 State Street, BOSTON, Mass.

fill four 8 x 4 knocking-off with 18 oz. on each. By this method time is saved, piecings and broken ends avoided, and a reduction in the amount of waste is made.

Saving Waste Sliver

It is often advantageous to have a spare gill box, where a well-practiced and careful giller can "sliver" or re-gill lengths of sliver and slubbing which would otherwise become waste. The girl or woman would first untwist the slubbing, which can be quickly done by wrapping each length round the hand, each wrap being equal to one turn of twist removed from the slubbing. This repeated once for thick slubbing slightly twisted, and twice for the slubbings containing more twist, is often enough to insure successful slivers being made.

These are then taken to the first gill box and worked in with the lot from which they were previously removed. Mills not possessing a spare gill box, may at some convenient time each day use an ordinary gill box for the purpose. This work should not be entrusted to an employe of careless habits; a skilful worker put on it can save many pounds of waste per week. For very fine weft purposes the re-slivered ends need not be put back into the same lot, but can be kept and used at the manager's discretion.

Full Use of Bobbin Capacity

The successful drawer or spinner will use to the utmost the capacity of his bobbins, consistent with easy manipulation in succeeding operations. This means skilful setting of lifter rails, use of washers of proper size, quality and number to give uniform drag, often indicating on each bobbin (in drawing) by some special mark the number of wraps around the flyer leg the operative should allow for each particular bobbin. Work of this description neglected often proves a fruitful source of waste. The machine tenders themselves should be trained to see the beneficial results from their standpoint when uniformly dragged bobbins are insured.

Clean Frames Make Less Waste

The clean machine or frame makes less waste than the machine where waste accumulates and dirty spindles and rollers are found. This is true in the drawing operations, but doubly so in spinning and twisting. The finer the end, the more susceptible is it to impediments. The more twist a thread requires, the more likely it is to attach itself to loose ends of unremoved waste in rollers, thread boards, etc.

A clean and skilful piecer can often transform a poor spin into a good one. The clean spinner believes in keeping ends up rather than piecing ends up. In each operation, minders should be encouraged to neatness and pride in themselves and in their work and machinery. The one who attends to the first will look after the second and third. Such neatness and pride help in keeping waste percentage down and also in reducing the amount of their own labor.

Production of Novelty Yarns

Materials Used in Fancy Ply Yarns—Methods of Delivering and Twisting Threads

By *Harry Turner*

THE chief types of fancy yarn made in the worsted trade are as follows:

SOLID OR SELF-COLORED. These include any yarn produced from slubbing-dyed material.

MIXTURE OR MELANGE. These are produced by the gilling together of any contrasting colors either in the dyed or printed state.

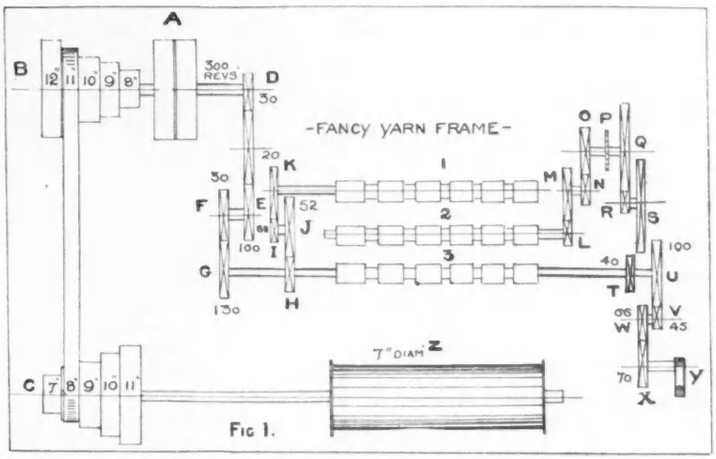

Fig 1.

MOTTLES OR TWISTS. These are produced by folding two contrasting colored threads together in the twisting operation, the turns per inch giving the required soft or hard effect.

HALF-MARLS. These are the result of folding a mottled (or two-color thread) with a solid thread in the twisting or folding. Example: 2-36s composed of one thread 1-36s black and white, folded with a 1-36s black thread.

MARL. This is produced by twisting together two mottled threads. Example: 2-36s composed of one thread 1-36s black and white, folded with a 1-36s black and white thread. The effect obtained is that between a steel gray mixture and a mottle or twist, thus enlarging the scope for effect in design for various classes of fabric.

CORKSCREW, SPIRAL AND ECCENTRIC. These largely depend upon the variation in the counts of the yarn which are twisted together, usually being a very heavy or coarse spun, folded with a fine spun yarn in various colors or material, the respective yarns being twisted so as to wrap one around the other according to the effect desired.

CHAIN OR DIAMOND. These are produced in a similar manner to corkscrew, but with a third fine thread twisted in at a second twisting operation, usually with half the number of turns in the reverse direction from the first twisting.

GIMP YARNS. These are made up by twisting together a fine and a coarse thread in such a manner that the coarse thread is delivered at a quicker rate than the fine one, this and the turns per inch in the single threads giving the effect from which the yarn derives its name.

KNOP YARNS. These are distinctly of the novelty type and introduce variety of material, counts, and coloring; also method of construction involving different lengths of yarn delivery, and consist of a yarn which has regularly spaced "knops" on its surface. These are arrived at by means of one or two foundation threads with a slow intermittent delivery and a number of threads being delivered at a quicker continuous rate, the constant stopping of the foundation threads allowing the yarn to accumulate in the form of "knops." A further thread may be introduced as a "binder" in the second operation, twisting in the opposite direction half the original number of turns per inch.

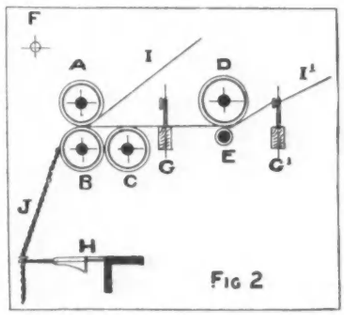

Fig 2

LOOP OR CURL YARN. This is made up as follows: Two fine foundation threads, slow, continuous delivery; one thick looping thread, quick, continuous delivery. The yarns are delivered by separate rollers and are brought together in front of the second pair, the effect being obtained by means of the excess delivery of the looping thread, combined with the stiffness of the fibre used (usually mohair or luster wool) which causes the loops or curls to form. This yarn may be bound by the introduction of another fine thread in a second twisting operation in the reverse direction with half the original turns per inch.

CLOUD OR FLAKE YARN. This is produced by the intermittent drafting of a thick sliver caused by the stopping and starting of the back rollers, and the constant delivery of the front, thus giving a yarn with a regular series of thick and thin places, which is usually bound by a thin thread running through the front rollers only.

It should be noted that other effects may be obtained by the twisting together of the types of yarns mentioned above, the scope of which largely depends on the imagination and ingenuity of the producer; also that they may be produced on the ordinary type of spinning, twisting and roving frames with adaptations.

Fancy Twister

On the other hand, a special twisting frame may be installed for the purpose, this being illustrated at Fig. 1. The driving is by means of a belt from the countershaft to fast and loose pulleys, A, on the machine. A series of cone pulleys, B and C, give the required speeds to cylinder Z, which by means of bands controls the spindles (not shown). Power is transmitted to the rollers by means of driving speed wheel D to driven speed wheel E. On the same stud with E is placed wheel F, which gears with front roller wheel G. A driving wheel H on front roller shaft transmits power through a double stud, I and J, to the back roller wheel K, and in this manner the back roller 1 and front roller 3 are controlled.

The driving of the middle roller 2 is obtained by means of wheel T (out of gear), which when in gear with double stud S and R, drives wheel Q and ratchet wheel P. On the same shaft is placed wheel O, which drives double stud, N and M, and so operates wheel L and controls the middle roller. On the front roller is placed wheel U which, through double stud V and W, drives wheel X and so controls cam Y.

The production of chain yarn is illustrated at Fig. 2. The foundation thread I^1 is delivered by means of top and bottom rollers, A and B, from back rollers, D and E, at the same surface speeds, the middle roller C and the guide rod F not being in use, the chain thread I passing through front rollers only. The guide G^1 controls the foundation thread. The partly made thread J passes through yarn guide H to the bobbin, and is afterward retwisted with the binding thread.

Reference to Fig. 3 shows the method of producing gimp yarns. The foundation threads, I^1 and I^2, pass through guide G^1 and are delivered by means of back rollers, D and E, passing over guide rod F and forward through the groove between rollers A and B. The gimp thread I passes through guide G, and forward through rollers A and B (the middle roller C is not in use) and forms the gimp

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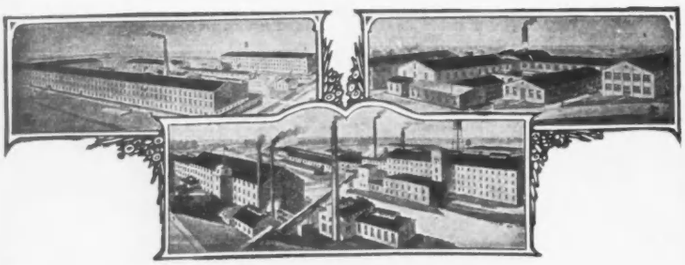

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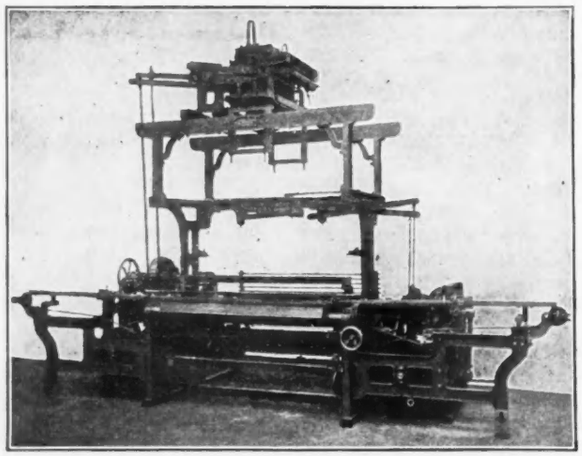

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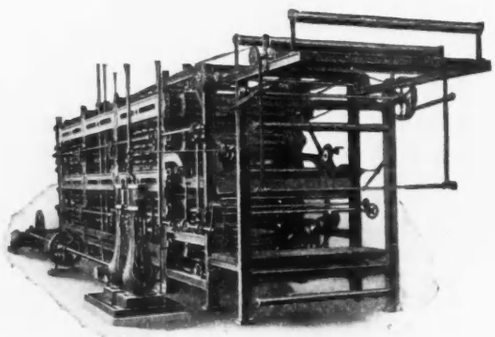

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yarn J which passes through guide H to the bobbin.

Fig 4 shows the method of producing slub or cloud yarns. The foundation thread L^1 is delivered by means of the front roller A after passing through the guide plate N. The thick

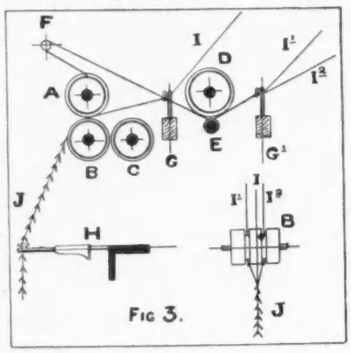


Fig 3.

slub thread L passes through guide K forward between the two pairs of rollers A and B. It is delivered intermittently by means of the ratchet wheel C and pawl D, operated by means of cam I and anti-friction roller H, through G, F and E. The variation in speeds of rollers A and B produces the required thick and thin effect. The slub yarn M passes

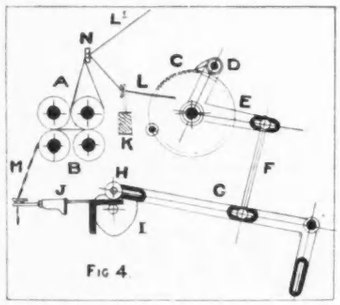


Fig 4.

from the nip of the front roller through the guide J on to the bobbin below.

Fig. 5 illustrates the mechanism involved in the production of knop yarns. The foundation thread M^1 is passed from the guide plate P to the front rollers A slowly, while the knopping thread or threads M pass through guide L^1 between the more

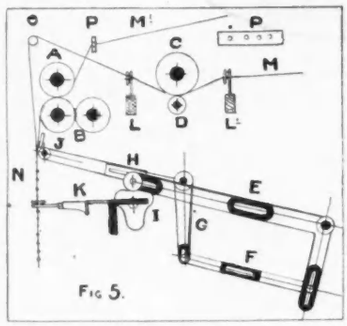


Fig 5.

rapidly rotating rollers C and D. The knopping material goes forward through guide L and over guide rod O, joining the other thread at the reciprocating bar J, which by means of cam I and cam roller H attached to lever E, with the necessary connections C and G, causes the thread M to accumulate in a regular series of knops, thus forming the yarn N. The yarn N passes through guide K to the bobbin situated on the spindle beneath. If required the knop yarn may be bound in the ordinary manner by retwisting.

It will be observed that other forms of yarn may be produced by this type of machine with the simple adaptations provided for the alterations in speeds and methods of delivery of the component threads which constitute any particular type of novelty yarn.—*The Textile Recorder.*

Making Leather Belts Endless

Uses of Regular and Waterproof Cement—Rivets, Pegs and Stitching Unnecessary

By *Louis W. Arny**

(Concluded from Sept. 1, issue)

THERE are two kinds of cement used for leather belting, regular belting cement and waterproof belting cement. Both can be obtained from the leather belting manufacturer. Both are of ample strength and durability, one being used for dry, and the other for damp or wet conditions.

The regular cement usually comes in cakes, or lumps, which are dissolved in water in a double jacketed glue pot. Any pot with a double jacket, that is, having an inner and an outer vessel, so that the heat reaches the cement through the medium of hot water, and not directly from the flame, will answer. It is better to use the safety or underwriter's glue pot, for in it the glue may be maintained under heat directly at the job, and without risk of causing fire.

Make the cement hot, but do not permit it to boil. It should be reduced with hot water to a proper consistency to spread easily, and must be applied "piping hot" to get the best results. It is desirable, too, that it should be applied fresh, and it is better not to attempt to use over the remains of a previous melting if it is old and hard. The pot and the brushes must be kept clean, remembering that the base of this cement is animal glue, which is subject to putrefaction.

Waterproof Belting Cement

The waterproof cement is entirely different. It is chemical, a base dissolved in a solvent other than water. The solvent is very volatile and highly inflammable, and it must be kept away from any open light. It reaches the buyer in a liquid form, usually ready to spread; though after some spreading the remainder *will grow thicker* and should be reduced by the addition of solvent, which can be had from the same source as the cement.

This cement is more like a varnish, and it is used cold. The surface to be cemented must be thoroughly coated with the cement, well brushed into the fibres of the leather, and then permitted to dry, which, because of the volatility of the solvent, it does rapidly. When dry apply another coat, spreading lightly, permitting this coat to dry in the same manner. Being perfectly dry, it now is ready for the third and last coat. Be sure to apply evenly, and do not leave any bare spots.

On belts wider than 12 inches do not attempt to cover more than a five-inch cross section of the belt at one time, since the solvent evaporates very fast, and it is easier to handle a small surface. When applying the last coat, work fast. Do not hammer the joint, but rub it gently, or place it between boards, and apply pressure with the bench screws. The joint should "set" for a couple of hours or longer before using the belt.

This waterproof cement substantially is liquid celluloid, and its application places a layer of celluloid between the two surfaces of the lap in which the leather fibres become embedded. It is unaffected by water in any period of time, because both its base and its solvent are materials which are not soluble in water. It should be used on all belts that are exposed to damp conditions, or on which water may leak.

Leather Is Waterproof

Leather itself is waterproof, not in the sense that a good oil-skin coat is waterproof, because it does not permit water to penetrate to the cloth beneath, but leather is waterproof in the sense that though it will absorb water freely, the water does not injure it, and the leather remains substantially unchanged in any amount of water. Leather belts joined with the waterproof cement above described cannot be injured by water. Belts exposed to flood or to wet conditions should be kept well dressed with a good animal grease belt dressing to maintain the lubrication of their fibres, and to prevent the leather from becoming hard when it dries.

Both regular and waterproof cements are thoroughly practicable for use in belts without the addition of any rivets, pegs, stitching, or other means intended to hold the plies of the belting together. Thousands of miles of belting are running every day with no other fastening between their plies than one or the other of these cements. Their efficacy has been abundantly proved by many years of experience and hence the addition of rivets or stitching not only is unnecessary but is a positive disadvantage to the belt in that every hole punched for a rivet or a stitch is a source of weakness and reduces the strength of the belt.

The occasion of taking a belt off the pulley for shortening or for repairs always presents the opportunity of making a careful examination of it, more particularly to see that it is properly lubricated. Leather is composed of thousands of little fibres that are constantly working on each other, which require lubrication in the same manner as other working parts.

* Secretary, The Leather Belting Exchange, Philadelphia.

Correct Costs

Fundamentals of Gathering and Distributing Overhead

By *William R. Basset**

It takes but little skill to determine exactly what the labor and material in a product cost, for these can be accurately measured with but little effort. Overhead expense is not so easily measured. It is inaccurate allocation of overhead that causes most inaccurate costs.

The pity is that the man who has an elaborate cost system may be getting wrong information from it, while believing that his cost figures are trustworthy. He who has no figures is better off than he who has wrong ones, for at least the first man knows that he is merely guessing.

No one method of getting overhead into the product will do for all industries nor for all concerns in an industry, but the same methods of gathering the costs fit all. The following are the fundamentals of correct accounting for overhead.

1. Gather overhead, not for the factory as a whole, but for each department separately.

2. Charge the overhead of a department only to those items of production that are operated upon in that department.

3. Overhead is a charge that the product must pay to a department for the use of the facilities furnished by that department. These facilities may include floor space, heat, light, power, supervision, non-productive labor such as truckers and janitors, and perhaps a rental for the use of machines. Therefore, it is important to determine a way to measure in dollars the use that the product has made of these facilities. It may be measured differently in every department. In one the man hour may be correct, in another the machine hour, the payroll dollar and so on. To determine the unit is a job for some one fully acquainted with the problems of production in the plant.

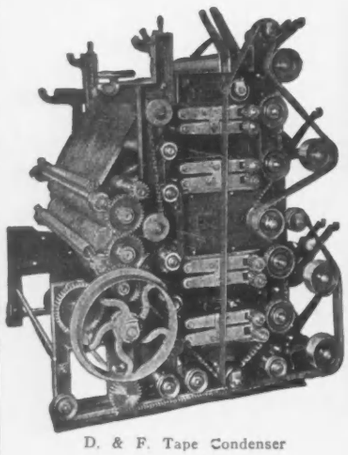
In plants where overhead is incorrectly spread over the product I have seen cases where costs were 50% off and more. Some were too high and others too low by that much. Such a condition makes business too much of a gamble.

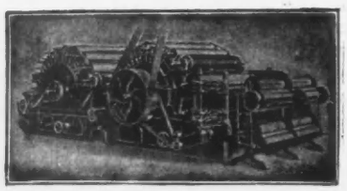
* President, Miller, Franklin, Basset & Co., Inc.

Motor Drive in Old Mills

(Continued from page 89)

several mills in the South have been averaged and indicate that the heating cost per year per 100,000 cubic feet of building is approximately $125. Naturally there are many factors which will make this vary, but there is sufficient uniformity to make this





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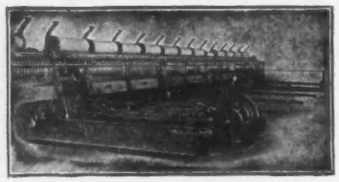

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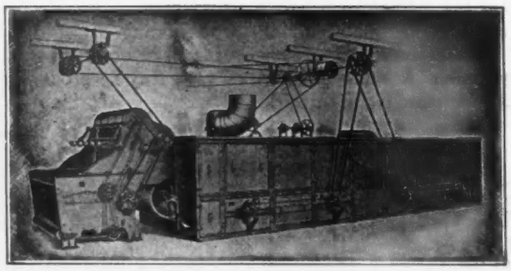

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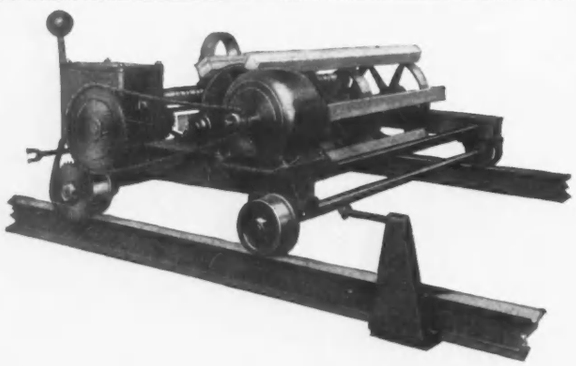

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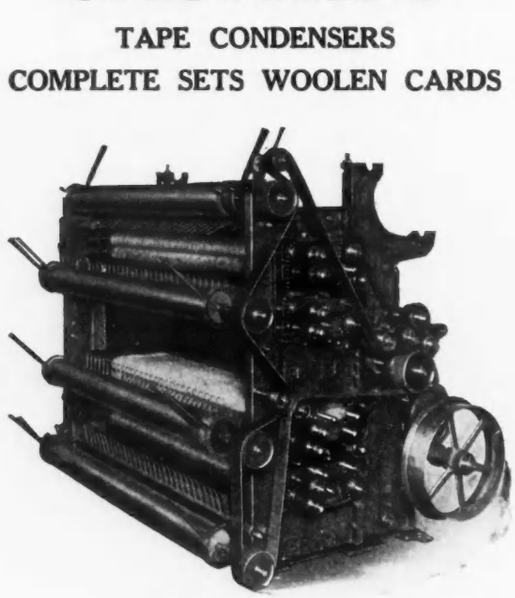

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figure useful as a preliminary estimate.

The details of installation, such as motor supports, layout of circuits, etc., have important bearing. It is permissible in certain places and with certain restrictions to omit fuses from branch circuits feeding motors. Whether or not this is advisable is the subject of some debate. It is claimed by some that with motors protected by automatic switches the omission of fuses simplifies the installation, and there are no fuses to blow on starting surges. This saves the loss of time for a renewal.

Others maintain that fuses are good insurance against serious trouble, and are convenient for disconnecting a circuit from the main feeder, thus permitting work on the circuit when the main is energized. No conclusion can be stated because there are installations of both types giving satisfactory service. It is to some extent a matter of individual choice, modified, of course, by local conditions.

Conclusion

The conclusion to the whole question of motor drive in old mills can be summed up in one question: Can my cost be lowered and my production increased by equipping my mill with a modern system of motor drive? The experience of many hundreds of mills shows that they have had this question answered in the affirmative. Many other mills would find the same answer if they would make a careful and impartial investigation.

With the competitive situation which exists today, the mill with the lowest costs is the one able to make profits when its competitors are losing both money and business. If electric drive has enabled other mills to lower costs, it will well pay any manufacturer who lacks a modern electric system to find out the possibilities along this line with regard to his plant.

August Wool Consumption

Slight Gain Registered Over Figures for Preceding Month

The Department of Commerce, Washington, D. C., has announced the following information with regard to the consumption of wool by manufacturers in the United States during the month of August, based on reports received from 595 manufacturers. They do not include data for the American Woolen Co., Boston, Mass.; Amos Abbott Co., Dexter, Me.; Carolina Cotton & Woolen Mills Co., Spray, N. C.; Columbia Woolen Mills, Columbia City, Ind.; Crown Mills, Marcellus, N. Y.; Daniel Boone Woolen Mills, Chicago, Ill.; Davisville (R. I.) Woolen Co., W. J. Dickey & Sons, Inc., Oella, Md.; John & James Dobson, Inc., Philadelphia, Pa.; Faulkner & Colony Mfg. Co., Keene, N. H.; Hillsborough Mills, Wilton, N. H.; Merrill (Wis.) Woolen Mills Co.; Merrimack Woolen Corp., Lowell, Mass.; or Sheble & Kemp, Philadelphia, Pa.

The total quantity of wool entering into manufacture during August, 1923, as reported, was 41,538,269 lbs., as compared with 39,542,599 lbs. in July, 1923, and 49,128,051 lbs. in August, 1922. The consumption shown for August, 1923, included 33,221,606 lbs. of wool reported as in the grease; 5,883,697 lbs. of scoured wool; and 2,432,966 lbs. of pulled wool. Reduced to a grease equivalent these quantities would amount to 48,232,955 lbs. The grease equivalent for August, 1922, 57,339,994 lbs. The monthly consumption of wool in grease equivalent for concerns reporting for 1923 was: January, 63,348,352 lbs.; February, 57,916,339; March, 62,859,150; April, 56,410,887; May, 59,682,254; June, 52,648,595, and for July, 46,347,256.

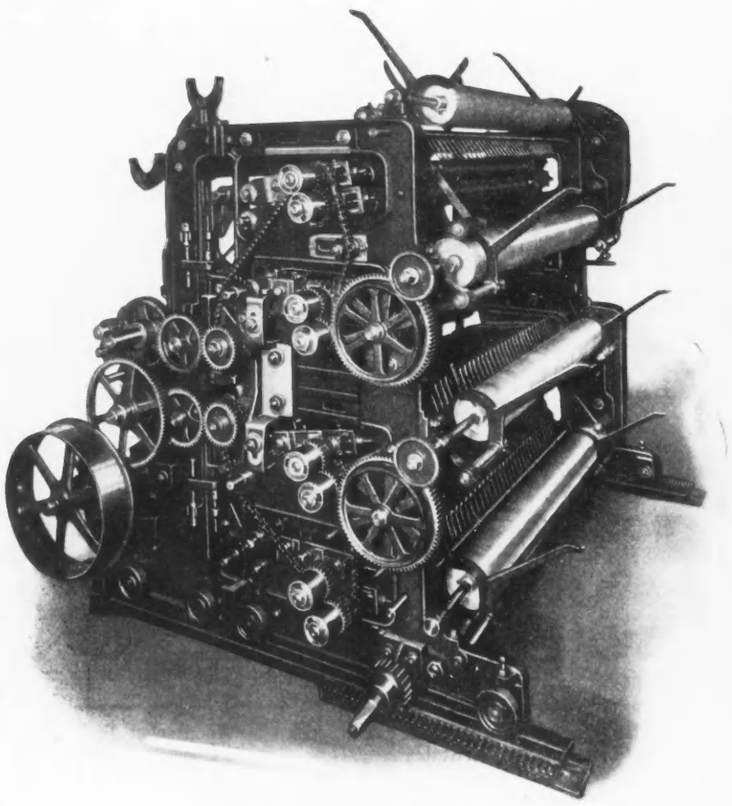
Consumption, by Grades

Classified according to grade, the total includes 8,703,717 lbs. of fine wool, compared with 8,147,714 lbs. in July, 1923; and 9,651,554 lbs. in August, 1922; 4,081,010 lbs. of ½ blood, against 4,396,106 lbs. in July, 1923, and 6,974,753 lbs. in August, 1922; 6,327,830 lbs. of ⅜ blood, against 6,608,732 lbs. in the month preceding and 8,515,072 lbs. in August, 1922; 7,411,849 lbs. of ¼ blood, compared with 8,385,296 lbs. in July, 1923; and 10,015,237 lbs. in August, 1922; 594,281 lbs. of low ¼ blood, against 709,250 lbs. in July, 1923; 170,413 lbs. of common against 105,363 lbs. in July, 1923; 55,986 lbs. of braid against 97,583 lbs. in the preceding month; consumption of Lincoln was 1,116,814 lbs. in August and 1,075,857 lbs. in July; and 13,076,369 lbs. of carpet wool, which is more than the consumption in July, which amounted to 10,016,698 lbs., and also consumption in August, 1922, 12,648,745 lbs.

Of the total quantity of wool used by manufacturers during August, 1923, 12,917,170 lbs., or 31.1%, was domestic wool; and 28,621,099 lbs., or 68.9% was foreign wool. The carpet wool was all of foreign origin, while 42.4% of the fine wool was produced in this country; 56.3% of the ½ blood; 50.9% of the ⅜ blood; 38.9% of the ¼ blood.

Of the total August consumption (amounting to 41,538,269 lbs.), 19,834,167 lbs., or 47.7%, were reported from the New England States; 42.7% from the Middle Atlantic States; 1.2% from the Pacific Coast States; and 8.4% from other sections.

The consumption of foreign tops and noils constitutes one element which it has not been possible to include in the consumption reports since the manufacturers would be unable to distinguish between foreign and domestic tops and noils. In the long run, though not necessarily month by month, this element must be equal to the imports. The imports of wool and hair, advanced, including tops, were: January, 1,021,243 lbs.; February, 504,377; March, 627,652; April, 324,386; May, 556,759; June, 367,998; July, 191,039; and August, 71,726. The imports of noils were: January, 1,157,559 lbs.; February, 947,733; March, 1,885,469; April, 1,115,769; May, 915,398; June, 433,893; July, 145,445; and August, 114,633.



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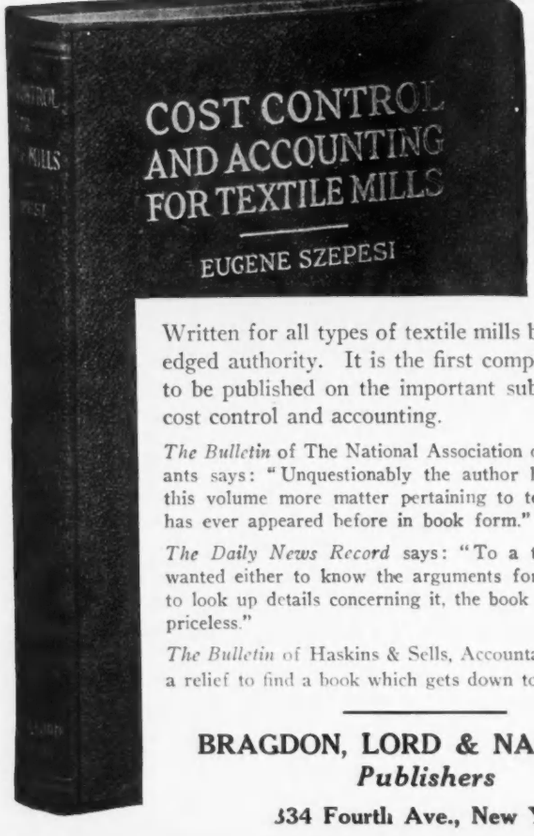

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QUESTIONS AND ANSWERS

Under this head we undertake to answer, free of charge, to the best of our ability, questions pertaining to textile matters received from any regular subscriber to TEXTILE WORLD. Inquiries should give the fullest information and data possible. In the case of damage to material, a sample should be sent. In this way answers can be given which will be of immediate technical value to the correspondent and to others in the same line. Inquiries pertaining to textile processes, machinery improvements, methods of management, the markets, etc., are especially invited as well as any legitimate discussion on the views expressed. All inquiries must be accompanied by the name of the person inquiring, not for publication, but as an evidence of good faith. The identity of correspondents will not be disclosed.

If the question is not of general interest to textile readers and involves expensive investigation, a charge covering the cost may be made, of which the inquirer will be advised before any expense is incurred.—EDITOR.

Scouring and Fulling Carbonized Wool Cloth

Technical Editor:

Under separate cover I am mailing you a sample of palmoil soap and a sample of 58 per cent. light soda ash, two materials which we use in scouring men's heavy all-wool ribbed underwear. The batch is oiled with two quarts lard oil and two quarts mineral oil per 100 pounds of carbonized all-wool batch. Will you kindly advise how much soda ash should be used to saponify this quantity of lard oil. How much additional soda ash could be added before it would commence to destroy the soap. When we speak of soap being killed by the use of excess soda, please explain by chemical formula the action which takes place. How may the scouring man know when the limit of soda ash has been added to the liquor. Is there any lime in this soda ash? If so, what effect will this have on the cloth? What is an average quantity of soap and soda required to scour and full 100 pounds of clean carbonized wool cloth? (4903)

It is not possible to answer the specific questions in this inquiry without causing confusion and we will, therefore, deal with the general subject of scouring and fulling a carbonized wool cloth.

Any emulsion oil must perform its function of properly lubricating the fibre for carding operations and then be capable of complete removal by the scouring operation. Sodium carbonate or light soda ash is helpful in starting the oil and dirt during scouring, but it is almost impossible to assign a definite quantity capable of removing two quarts of lard oil per 100 pounds of wool stock used. In general, the dirtier the goods and the greater amount of emulsion oil used, the greater amount of soda ash that should be used.

Soda ash added to soap in any quantity will not destroy soap. If added in sufficient quantity to a soap solution, the soap will be forced out of solution and will rise to the top. This phenomenon has been spoken of as destroying the soap. Merely adding water will restore the soap to its usable form. The same result could be secured by adding salt to the soap solution. If lime is present in soda ash, it will demonstrate its presence by forming a milky solution. Lime combined with soap in cloth makes an insoluble soap, which is very likely to cause streaks.

If carbonized wool is used, which has not been neutralized, it is essential that the goods from the loom or knitting machine be neutralized in the soda bath before any soap is applied to the cloth for scouring or fulling operations. Provided neutralized wool has been used, the gray goods can be sent directly to a fulling mill and scoured after being fulled. Dependent upon the character of the stock used, a fulling solution containing from 2 to 6 ounces of soda ash and from 3 to 8 ounces of soap can be used. In fulling, enough of this solution should be used to keep the goods wet enough to prevent excessive flocking. Upon experimenting, we find there is no lime in the soda ash.

Painting Pipes

Technical Editor:

We have trouble to find a paint that will afford protection to the pipes in our dyehouse. We have used ordinary paints but they soon disappear from the pipes and are replaced by a bad coat of rust. We use in our processes soap, acids, ammonia, soda ash, etc. Can you tell us of anything that will remove the rust before painting and give us the name of a paint that will last a reasonable time after being applied. (4887)

In considering the subject of painting pipes or other materials that are exposed to various chemical fumes or liquors in addition to water, several precautions must be observed in order to obtain satisfactory results. First, the surface to be painted must be properly prepared, and second, the paint must be particularly fitted for the work.

The surface must be free from oil and grease, and absolutely dry when the paint is applied. In all protective coatings, in order to obtain proper adhesion of the paint to the material the paint must be thoroughly worked into the uneven surfaces. A surface may appear to be smooth, yet a magnifying glass will show considerable roughness. For this reason a fairly stiff brush should be used for the priming coat, at least, and the paint should be well rubbed in. Any oil or grease present will prevent intimate contact of paint and metal and results will not be satisfactory. The same objections apply to rust. Rust is really a scale, more or less loose, on the surface of the iron, and if it is not removed the paint will be on the scale, not on the metal; when the rust scale increases or loosens, as it surely will, the paint will come off with it.

Several methods can be used to remove rust, depending upon its nature and amount. For heavy work a stiff wire brush will be found the best. After the bulk is removed the work can be completed by using ordinary sand paper or emery paper. For satisfactory work all rust must be removed.

The second consideration is the nature of the paint to be used. If there is expansion and contraction of the material due to changes of temperature it is evident that the body of the paint should be one that as it dries will be elastic, in order not to crack, blister or flake off. Also it should be one that will not soften under the action of water. Linseed oil paints give much trouble because they do not fully meet these requirements, particularly the first group. A very satisfactory coating for this purpose is made by mixing aluminum powder with a high grade acid proof varnish. This is thoroughly worked into the surface and a second coat applied. Frequently graphite is mixed with the second coat and then a third coat of the varnish is used. This varnish is particularly good where stains on cloth are to be avoided.

Galvanized metal calls for a special paint for the first coat at least, in order to obtain satisfactory results. When this metal comes from the galvanizing vats it carries on it an acid coating that prevents a linseed oil paint, for instance, from adhering, and if such paints are used they soon will peel. The first coat therefore should be a special paint made for this purpose, which will neutralize the acid covering previously mentioned. The second coat may be an oil paint of any good brand. Names of manufacturers of special paints for surfaces in dyehouses have been sent to the inquirer.

* * *

Finishing Three-Leaf Twills

Technical Editor:

We are enclosing two samples of 31-inch, finish 28-inch, 64 x 72, 4.00, 3-leaf twill in pure finish pearl. These are marked "A" and "B." You will note that "A" has a greater luster than "B" and yet the twill stands up better and the warp thread is more prominent than in "B." We would appreciate an opinion as detailed as possible as to what the differences are between the processing of "A" and "B." (4905)

From a physical standpoint it is quite apparent that the sample "B" is a much better finished product, and the writer is of the opinion that the cloth has been treated about as follows in the finishing:

After dyeing the goods evidently have been finished with the proper sizing materials on an ordinary 2-roll starch mangle with a maple and brass roll, this mangle being one of the members of a complete finishing range which would consist of starch mangle, six or eight drying cylinders in upright form, 60-foot to 90-foot tenter, automatic straightaway type, with hot air heating system, possibly followed by four or six cylinders at delivery end acting as a selvage dryer, and the goods taken off the finishing range either by an automatic double drum winder or folding device.

After tentering and finishing in this manner, goods have been properly dampened or conditioned and afterwards calendered on a 3-roll friction calender with the top chilled iron roll not heated. This friction calender is probably composed of the necessary heavy side frames with a 12-inch diameter chilled iron roll at the top, middle cotton roll about 20 inches to 22 inches diameter, and a botton dry sand cast iron roll 18 inches to 20 inches diameter. This calender would be designed with side gearing on the opposite side to driving side, consisting of three gears, one gear on the journal of the top chilled iron roll, one gear on the botton dry sand iron roll and an intermediate gear supported on a horn and stud. The gears are so designed and laid out that the top roll is driven at a higher speed than the cotton roll, thereby giving a polished effect to the goods. The average amount of friction used on a calender of this type varies from 50 to 80 per cent., but on work such as these twills, it is well to have a small percentage of friction, not more than 30 to 40 per cent., so that the twill effect is not laid down too heavily.

As regards sample "A," this piece of fabric seems to be filled or starched at about the proper degree, but the goods show the effect of simply being ironed or run through an ordinary smoothing calender with heated rolls. If sample "A" had been run with cold metal rolls, it would be as dull as the sample marked "B" in finish and the twill would be about the same.

It may be possible also that after calendering, sample "B" has been run over a 30 or 40 foot tenter with twill face upward, and a small supply of steam played on the goods at the entering end of tenter, with the tenter just slightly stretching the goods to bring up this twill. The writer doubts this, as the sample has all the appearance of being a straight calendered finish after a properly obtained finished condition over a tentering range.

* * *

Silk Throwing

Technical Editor:

What is the cost of throwing silk and winding it on cones ready for knitting purposes (10 and 12 thread)? In other words, what should be added to the cost of raw silk as quoted in the market in order to arrive at the cost of silk on cones ready for the knitting machines? (4927)

Only an approximate figure can be given as costs vary with local conditions. A rough figure on the cost of throwing and delivering the thread on cones is from 70 to 75c. per pound, plus an allowance of 2% for waste. The amount to be added to the cost of raw silk is probably about 90c. per pound.

* * *

Adding Luster to Cotton Knit Goods

Technical Editor:

Will you advise me what is the best dressing to give the maximum strength and luster to tubular cotton jersey cloth? (4925)

We do not know of a dressing that will give both maximum strength and luster on cotton knitted goods. There are recipes which will add luster to the cotton but are not intended to add strength. A knit goods dyer writes that Minerol F. Medium is used in his dyehouse and adds luster to cotton dyed yarn. As the inquirer wants maximum strength and luster the only thing we can recommend is a mercerized yarn. Of course this costs more than a dressing if such could be obtained. This is a chance for research work.

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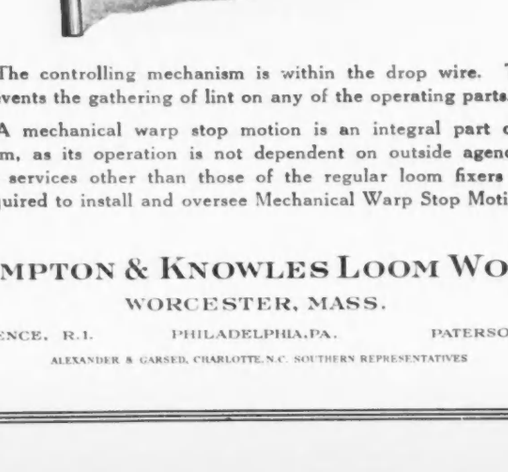

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COTTON GOODS MARKETS

Cotton Crop Report Confusing to Trade

Interpretation Difficult for Both Buyer and Seller—Hopeful on Ginghams

The Government cotton crop condition report of 49.5, as of Sept. 25, indicating a yield of 11,015,000 bales, came as a mild surprise to the goods market. Its immediate effect was to delay still further business on print cloths which many felt would be placed immediately following the report. General expectations had been for a more bullish bureau, an average of the goods market's expectations probably being around 10,750,000 bales.

Uncertainty regarding the immediate future of raw material prices is thus increased, and it is probable that considerable time will be taken by both mills and their customers in digesting the full meaning of the report.

Lower Cotton?

Possibly never before has the cloth market been so dominated by the highly speculative raw material. Despite all the signs pointing to high cotton for the remainder of the crop year, the fundamental feeling has never been lost sight of that goods cannot be merchandised in volume on a basis of 30c. cotton. To some in the trade the Government report of Tuesday makes more probable an easing in cotton quotations, and every fluctuation of the market is being watched with the keenest interest.

Ginghams Develop Slowly

Ginghams are naturally occupying a position of major importance at this time. Conflicting reports are heard as to the volume of business being taken for next spring, but no one will quarrel with the statement that as a general proposition business will be slow in developing. A few outstanding exceptions will only prove the rule. All prices have now been made, and agents handling southern goods report a satisfactory volume to date. As predicted, southern mills have not granted seasonal dating, but their prices are regarded as most attractive.

Reports agree that there has been considerable improvement in the movement of ginghams from both jobbers and retailers, but this does not mean that the situation will be cleared up overnight. Jobbers in many sections of the country still have large stocks of fall goods to move before they can give proper consideration to merchandise for spring. That they are making strenuous efforts to clean up these stocks is attested by prices they are quoting, some of which are under those for which they can buy new merchandise.

Prices must go up still further on many classes of finished goods in the absence of a break in raw material values, and it seems inevitable that this will be a gradual, dragging process. General business during the week on finished goods was reported slow, in harmony with the quiet gray goods market. New percale prices are still awaited, and there is much speculation as to the extent of the advance which will be made.

Cotton Goods Trade Notes

The market letter of the National Wholesale Dry Goods Association dated Oct. 1 quotes a prominent factor in the percale business as follows: "Until the cotton market ceases to show such wide fluctuations for a while I doubt if any new prices will be made, as an advance today of 2c. a yard in finished goods, although merited, would probably not sell the goods coming from first hands, as jobbers generally are not getting much over 14c. a yard for light 64s."

Another important factor is quoted on general conditions in the same letter as follows: "There would seem to be little doubt but that an active business for the balance of this year and for the early months of next year is before us, and equally little doubt that it will have to be done on a higher basis for cotton goods."

Parker, Wilder & Co. have advanced the prices of Boott Mills BMAT absorbent toweling ½c.; Boott Mills towels and bureau scarfs have been advanced proportionately.

Stocks of cotton in European ports on Sept. 14, according to a report from the Liverpool Cotton Association, were as follows: Great Britain, 66,830 bales American, 317,150 bales all kinds; Hamburg, no bales American, 16,450 bales all kinds; Bremen, 29,390 bales American, 41,230 all kinds; Havre, 14,050 bales American, 23,060 bales all kinds; Genoa, no bales American, 2,320 bales all kinds; Barcelona, 47,000 bales American, 60,860 bales all kinds; Other Continental ports, 1,000 bales American, 2,290 bales all kinds.

Preliminary figures of the Department of Commerce show the following totals of imports of cotton goods into this country during July of this year: unbleached, 1,063,979 pounds, valued at $1,202,639; bleached, 141,092 pounds, valued at $239,858; printed, dyed, colored or woven figured, 1,625,351 pounds, valued at $1,987,597.

British exports of piece goods during the period Aug. 1, 1922, to July 31, 1923, totaled 4,309,658,700 square yards, valued at $142,254,364 compared with 3,808,576,700 square yards, worth $136,026,206, in the cotton year 1921-1922. This represents an increase of 13% in the quantity but of only 4.5% in value.

Compared with exports for January to July, 1922, figures for the first seven months of 1923 show an increase of 128,482,000 square yards, which is more than accounted for by the improvement in Indian purchasing, 836,961,800 square yards going to the Dependency in the first seven months of 1923 against only 664,389,700 square yards in the corresponding period of the previous year.

Half-Time Work Continued

(From Our Regular Correspondent)

MANCHESTER, ENG., Sept. 21. — A special meeting of the American section of the Federation of Master Cotton Spinners' Associations was held in Manchester Sept. 21 for the purpose of considering the state of trade. F. Holroyd, the president, occupied the chair. Reports relating to short-time working in the various districts were placed before the committee and it was unanimously decided that the members using American cotton be strongly recommended to continue curtailment of production to the extent of 50% during October. Organized half-time working commenced in the spinning mills in March, but organized short-time has been worked since July of last year.

Comparative Quotations

	Oct. 4	Sept. 27	Oct. 5, 1922
Print Cloths:			
27 -in., 64x60, 7.60 yd.	7½c.	7¾c.	6¾c.
38½-in., 64x60, 5.35 yd.	10c.	10⅝–10¼c.	9c.
39 -in., 68x72, 4.75 yd.	11¾c.	12c.	10⅝–10¼c.
39 -in., 72x76, 4.25 yd.	13c.	13c.	11¾c.
Brown Sheetings:			
36 -in., 56x60, 4 yd.	12¼–12½c.	12¼–12¾c.	10¾c.
36 -in., 48x48, 3 yd.	14½–15c.	14½–15¼c.	11¾–12c.
37 -in., 48x48, 4 yd.	11¾c.	12c.	10c.
Pajama Checks:			
36½-in., 72x80, 4.70 yd.	12½c.	12½c.	10½c.
36½-in., 64x60, 5.70 yd.	10¼c.	10¼c.	9c.
Drills, 37-in., 3 yd.	15¼c.	15¼–15½c.	13c.
Denims, 2-20s (indigo)	23c.	23c.	19½c.
Tickings, 8-oz.	27c.	27c.	26c.
Standard Prints	9¼c.	9¼c.	10½c.
Staple Ginghams, 32 in.	19c.	19c.	14¼c.

Manchester Market In Unsettled State

Feeling Is Bearish, but Many Do Not Expect Much Lower Values —Egyptian News

MANCHESTER, ENG., Oct. 4—(*Special Cable to* TEXTILE WORLD)—Conditions in the market this week have been very unsettled. Official reports on the American cotton crop have had a disturbing influence. Although the feeling is now rather more bearish, numerous traders do not anticipate much lower values. The difficulty, however, is to get cloth dealers in Eastern outlets to pay Manchester prices for lots of quantity.

No agreement has yet been reached between the shipping merchants and the dyers on the question of prices but amicable arrangement is likely.

Recent cables with regard to the crop in Egypt are less favorable, the adverse climatic conditions having caused deterioration in the quality of the staple.

The demand in cloth for India has again been of reduced dimensions. Stock lots have been sold for Calcutta and Bombay in light fabrics but bids in gray staples remain very poor. A rather more hopeful feeling prevails as to future trade for China partly owing to the recent hardening movement in silver in small lots. Buyers for the Near East and South America have given rather increased support and more activity has been reported in the home trade section.

Spinners of American yarns continue to do very badly. Steady demand is noted in Egyptian yarns. Index number for the week is 229.

Growth of S. C. Industry

COLUMBIA, S. C. — A statement issued by B. Harris, commissioner of the State Department of Agriculture, Commerce and Industry, for the year ended in August shows that the value of the annual product of cotton mills has increased by more than $44,000,000, from $163,419,262, in 1921-1922 to $207,524,637 in 1922-1923. The capital invested has grown from $155,354,299 to $157,405,283; the number of spindles from 5,075,672 to 5,111,686; the number of looms from 116,517 to 119,413. The number of employes now is 68,538, compared with 62,422 last year, and 55,896 in 1921. The par value of capital stock has increased from $120,505,876 to $125,732,688.

Marine Corps Asks Bids

The Quartermaster of the Marine Corps has announced that bids for 80,000 yards bleached and shrunk drilling, will be received at the Phila. Depot, 1100 S. Broad Street, on Oct. 14, 1923.

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New Movements in Women's Wear

Buyers Seek Imitation Fur Fabrics —Check and Plaids Gain Favor for Dresses

The women's wear market is making further progress and mill agents in this field remain optimistic over the future. There have been a number of interesting developments along the lines of particular fabrics which have come into especially keen demand to fill cutters' requirements which early retail sales have shown to be inadequately covered. The consumers' bent toward certain sorts of goods had apparently not been anticipated and some of the last minute demand for the more unusual goods will probably not all be filled. Such a wave of demand as this often arises during the distribution season, and is considered significant in relation to the trend of popular taste for the next season. In the light of some of this call for immediate goods a clearer formulation of ideas for the new spring season is possible.

Seek Astrachans for Jacquettes

There has been more inquiry for astrachan fabrics for use in jacquettes. These garments made themselves evident a year ago and their style influence at that time was regarded as most important. They have steadily gained a place for themselves and are now appearing in all-fur, as well as in fur-trimmed imitation fur fabrics and other cloths. A garment maker interviewed during the week argued his belief that the weaving trade had been blind to the possibility of woven astrachans and other imitation fur fabrics, and that his business and the business of many others was going to knitters who are able to make goods of similar appearance on a most economical basis.

Checks and Plaids Popular

A second trend said to be of even more moment is the call for small checks, particularly in flannels and other fabrics more recently adapted to making of dresses. The styles sought are not limited to black and white effects, but include the full range in which these checks appear. As an outgrowth from the check, or running parallel to it, is growing a movement toward plaids for dress wear, according to several market authorities. The plaid has rapidly been coming to the fore in the coating field and in these heavier fabrics there seems little choice between checks and plaids. However, in the lighter fabrics for dresses the plaid has only recently come to have a prominent place. Several extreme models are shown in the fall displays of prominent garment houses using plaids with blocks of six to eight inches. That these or more conservative forms of the same thing are meeting with success is demonstrated by the repeat orders reported on the fabric market this week.

Women's Wear Trade Notes

Lawrence & Co. have named prices for deliveries of Pacific worsted dress goods for spring, 1924. It is reported that in many instances there is no change from the fall prices, but that there are some advances of 1½ to 2½c. per yard. New numbers include a Poiret Lustrene and several new crepes and fancies.

Certain mills are showing poiret twills in plaids and stripes which have been favorably received by buyers.

The return of goods by retailers is said to be holding back the development of the local garment trade and much feeling is being aroused by alleged unreasonable activities along this line.

More Cheerful Tone in Bradford Trade

But Difficult to See Ground for Optimism as Far as Finer Wools Are Concerned

BRADFORD, ENG., Oct. 4 (*Special Cable to* TEXTILE WORLD).—New business in tops and yarns is confined chiefly to qualities ranging from 32s to 46s. Substantial orders have been placed for these sorts both on home and export account with a particular run on 44s carded tops and low single yarns for export to Continent. Fair demand is also noted for cheaper qualities of crossbred cloths. This makes values firm for corresponding grades.

Fine crossbreds are rather neglected at Bradford and concessions can be had on quoted rates. Merino tops and yarns are also neglected. Quotations in all cases are higher than what users can afford to pay but high price of wool in London and Australia cannot be ignored.

Generally the market is more cheerful although there is no ground for optimism so far as finer wools and their products are concerned.

Quotations for 64s tops are unchanged at 61 to 63d.; users are not paying such prices; 56s weak at 36d. while 46s have sold well at 17¾d. and are often quoted at 18d.; 2-48s botany yarn nominally quoted 6s. 3d.; spinners would probably take three pence less to get business although this would mean selling at substantial loss. Most of business done in merinos or crossbreds is at little more than bare cost price.

Better reports continue to come from Japan and a number of can-

(*Continued on page* 163)

Little Change Noted in Men's Wear Field

Present Curtailment May Lead to Reaction in Few Months— Clothiers Liquidating Stocks

There has been little change in the men's wear situation during the week. Selling agents in New York have found trade extremely quiet though from some quarters still come reports that there is a steady current of small reorders which show the clothing trade to be still alive though covering future needs cautiously. A number of prominent factors in the men's wear field have come to recognize that their industry is in a period of curtailment which they are beginning to accept as necessary to balance the heavy overtime operations of last winter and spring. The problem for the clothier is one of liquidation of stocks, and until he turns more of his merchandise into money he will not be in a position temperamentally or financially to commit himself on more goods.

Trade Needs Governor

Selling agents who have been in the game for many years say that the old story of "feast or famine" in men's wear is being repeated. One such merchant pointed out that the market is like an engine without a governor to restrain and regulate its speed. If such a governor could be applied, the periods of overenthusiasm and overproduction would be avoided and the periods of curtailment would be less marked. As the situation stands, the present curtailment policy is likely to be overdone with a resulting scarcity of goods and eager buying and again a forced draft on production in a few months. Some reliable authorities believe that this reaction will be in evidence next February. The industry is still awaiting someone who can smooth out the hills and valleys which have marked the trade's progress. The money made by most manufacturers during the first six months of this year is likely to be lost during the last six months, say agents, but the hopeful thing about it is that money will probably again be made in the next ensuing six months.

Limitations on Spring Goods

The representative of a large mill believes that the clothing trade will be unusually cramped on fabric styles for next spring. He pointed out this week that most mills do not decide to retain specific styles in their line until after initial business is in and it is plain that enough pieces are sold to warrant putting the style in the works. This spring season when many mills are without any initial spring business worthy of the name, the matter of styles is still unsettled despite the fact that clothiers are about to go out with garments to the retail trade and to take orders on reference samples of styles which may never be made. Two months have already been lost out of the spring season, and this with the recent cutting down of heavy weight production is the basis for the belief that there should be no superfluity of goods for retail distribution for some months.

Men's Wear Trade Notes

The businesses of A. N. Dusenbury, Inc., and H. W. Schwab, Inc., have been consolidated as Dusenbury & Schwab, Inc., as of Oct. 1, the firm to be located in enlarged quarters on the 10th floor of their present building at 229 Fourth Avenue.

The cooler weather which came in with the month of October was hailed with joy as a stimulant to retail trade through the East.

Considerable thought has recently been given the matter of collections for the reason that bills due Oct. 1 have proven very slow in settlement. It is understood that the retailer has been slow in settling his debts to the clothier and the latter is consequently more hungry for money than for goods.

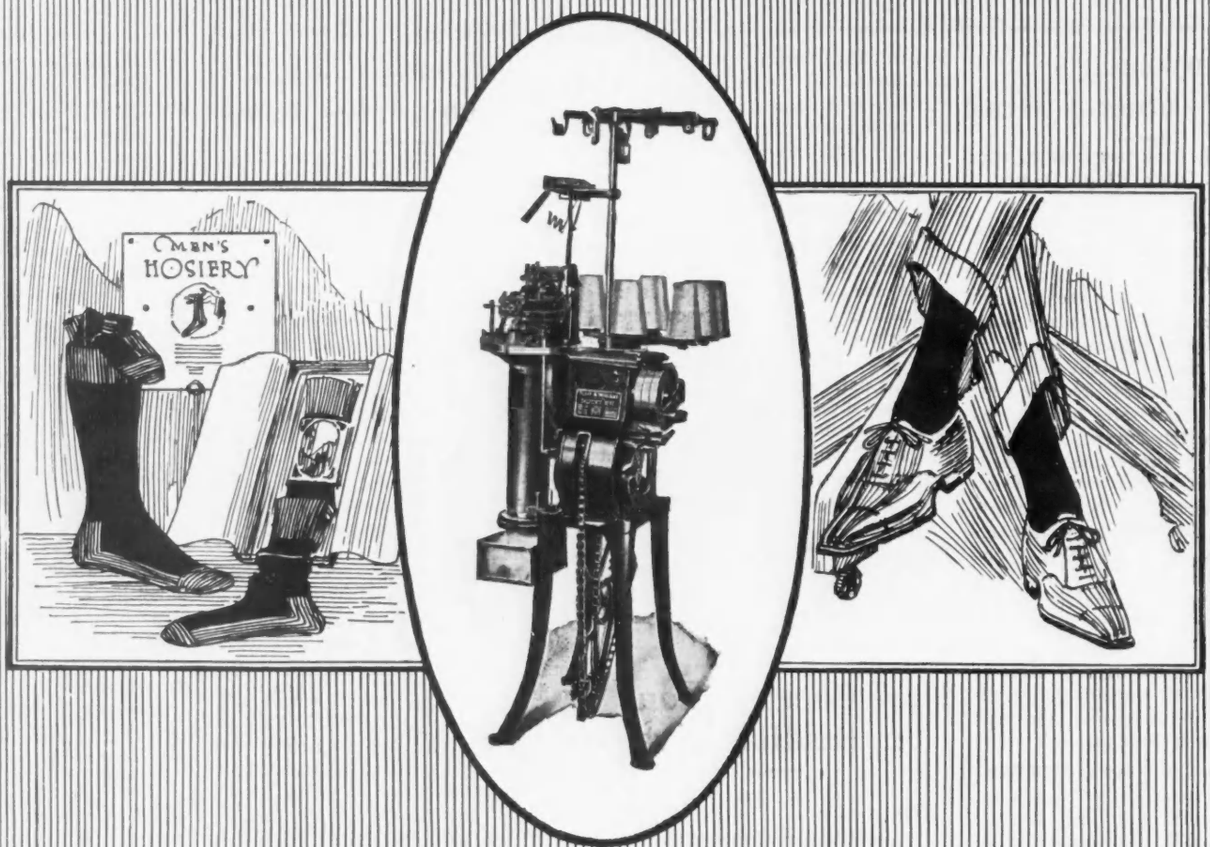
Importers of British goods report that they, in common with domestic mill agents, have few spring orders from American clothiers on their books. Several of them are planning to show goods for fall, 1924, in about a month. They feel that the heavyweight season is the period in which English goods are logically at their best.

Overseers to Meet

The 40th annual meeting of the National Association of Woolen and Worsted Overseers will be held in Mechanics Building, Boston, Saturday, Nov. 3, at 10 a. m. Officers will be elected for the coming year. Dinner will be served in the cafe of the Mechanics Building from 12 m. to 6 p. m. J. H. Pickford, Webster, Mass., Secretary, wishes to be notified by Oct. 20 regarding reservations for dinner.

Clothing of Farm Women

WASHINGTON, D. C.—Education of the farm woman in careful buying rather than in making her own clothing and that of the members of her family will be the major object of the program outlined by Dr. Louise Stanley, chief of the Bureau of Home Economics of the Department of Agriculture. The Bureau recently was organized, dating its official existence from Sept. 1. It is Dr. Stanley's opinion that a farmer's wife can find more valuable uses for her time than in making clothing for the household.



MODEL H-H

Producing Ribbed Top Half Hose Complete

ESTABLISHED 1865

SCOTT & WILLIAMS

INCORPORATED

366 Broadway, New York

KNIT GOODS MARKETS

Hosiery Again Spotty in Primary Market

Big Volume Booked in September —Silks Being Quoted Generally Through December

"Spotty" has again become the best single word description of hosiery conditions in the primary market. Reports of current business differ considerably in various selling offices. Considering the market as a whole it is not to be questioned that volume this week and last was not up to that of the early weeks of September.

This is entirely satisfactory to a number of mill representatives, who say that their trade have bought even more freely for spring than they anticipated. Others are not so well pleased, and complain that initial spring business is not what it should be. There are those who disagree with the statement that a good portion of the jobbing trade of the country have covered at least 50% of their normal spring requirements on staples, but this seems to be a fair average reflection of business to date.

There is no question that September was a most satisfactory month in practically all divisions of the market except silks. This is particularly true of low-end goods. In several instances the largest volume in their history was recorded last month by mill representatives specializing on low-end goods.

Spring Prices on Silks

Conditions in silk hosiery are by no means definitely established but the market has opened up to a considerable extent. It is still difficult to separate reliable information from the mass of rumor and gossip which floods the market. Most lines going to the jobbing trade are now being quoted for delivery up to the end of the year, and it is understood that on a number of them no advances have been made. This is also reported to be the procedure adopted by several direct sellers.

A well known line of women's full-fashioned goods for the jobbing trade has been priced for delivery during the first six months of next year, this being the first official announcement of this kind. It is reported that the new prices are approximately $1 higher than those quoted for fall, and that they are guaranteed.

The Low-End Market

For 176-needle half hose, quoted prices range from $1.07½ to $1.15, the last named being a freight-paid price. It was reported during the week that one mill was quoting $1.20 on this merchandise, but if this is the case the mill in question has no desire for business. Lines which are quoted at $1.07½ net are understood to be well covered with business up to the end of the year; in one section where $1.12½, with terms, is being quoted, it is predicted that this price will be $1.15 within the next few weeks.

Hosiery Trade Notes

The Oakbrook Hosiery Mills, Inc., M. N. Blumberg, selling agent, are quoting prices for the first six months of next year, equal monthly deliveries being offered. This is the first official action of this kind taken by any mill selling silk hosiery to the jobbing trade. Mr. Blumberg said at midweek that volume business was being received, and he expected the line to be sold up in short order.

In several sections of the market the opinion is freely expressed that the amount of business recently placed in silks for delivery through December is much larger than generally supposed.

A. J. Voorhis, until recently associated with Robt. P. Steele & Co., is now covering New England and part of the city trade for J. P. Voorhees.

Women's low-end cotton goods continue to lag behind the procession. One selling agent is experimenting with silk clocks on 176-needle goods in an effort to move them more freely.

The Government cotton crop report of Tuesday indicating a yield of 11,015,000 bales, is expected to produce much conversation from buyers, and little else.

Imports of cotton hosiery into the United States during July totalled 50,553 dozen pairs, valued at $99,913, according to figures of the Department of Commerce. Of this total Germany furnished 48,353 dozen pairs, valued at $87,696. Wool hosiery imported during July amounted to 55,973 dozen pairs, valued at $292,572; of this total England furnished 48,902 and Germany 4,117 dozen pairs.

A Unique Catalogue

Unique among literature issued by hosiery manufacturers is the catalogue recently published by the Richmond Hosiery Mills of Chattanooga, Tenn., and Rossville, Ga. In addition to the usual descriptions and illustrations of plants and products it contains several features which are distinct departures from the ordinary. Chief among these is a dictionary of hosiery terms, which gives most complete definitions, in non-technical terms, of many words and terms in common use in the hosiery business. The 32-page booklet has been highly praised by advertising men as an excellent example of the kind of information-giving catalogue which produces maximum sales results.

Underwear Styles

Association Committee Decides to Feature Three Types

The style committee of the Associated Knit Underwear Manufacturers of America at its meeting in New York last week decided to feature three types of knit underwear in spring and summer advertising. These are: Quarter sleeves with three-quarter legs; sleeveless, with athletic knee length and sleeveless, with three-quarter length leg. These types apply to men's, women's and children's garments, in both union suits and shirts and drawers. It is planned to select a distinctive name for each style and to popularize these names.

A report was made by the advertising director of the association to the effect that properly bleached knitted garments absorb more moisture in proportion to their weight than do unbleached garments, and permit of more rapid evaporation. It was voted to give the bleaching process a distinctive trade mark and to feature this in advertising of lightweights.

The style committee decided to enlarge its membership by including two representatives of each of three allied associations—the National Association of Retail Clothiers and Furnishers, the National Retail Dry Goods Association and the Wholesale Association of Knit Goods Buyers. A meeting of the enlarged committee is planned for Nov. 13 at Utica.

Outerwear Convention

The annual convention of the National Knitted Outerwear Association will be held in Cleveland, Ohio, Nov. 1, 2 and 3. The program as outlined to date includes a theatre party the evening of Thursday, Nov. 1, a formal banquet Friday evening at a Cleveland club, and a luncheon on Saturday at the plant of the Friedman-Blau-Farber Co. at which A. J. Farber will be the host. Visits are scheduled to the plants of the Erie Dyeing Co., the Cleveland Worsted Mills, and the Artificial Silk Mills.

Cotton Stocks on Aug. 31

The Merchants National Bank of Boston computes the total stocks of cotton in the United States at the end of August, including the estimated unpicked portion of the growing crop, as about 11,880,000 bales, against 11,829,000 bales last year and an average of 14,099,000 bales in the last four years. Spinners' stocks were 807,000 this year, against 1,025,000 last year and an average of 1,073,000 in the last four years. Stocks in public and private storage, on plantations, and in transit were 11,073,000 this year, against 10,804,000 last year and an average of 13,026,000 in the last four years

No Change in Underwear Conditions

A Quiet Market Awaits Heavyweight Duplicates and Raw Material Developments

There has been no change of moment in the underwear market situation for several weeks. Aside from comparatively small, fill-in business on heavyweights and a few lightweight lines, action of any kind has been lacking. It has again become a waiting market, with the attention of most buyers and sellers largely concentrated on the raw material and its possibilities.

As the situation stands, initial business on many lines of lightweights, particularly balbriggans, was completed some weeks ago, and most well-established lines continue either sold up, temporarily withdrawn or advanced radically to ward off further business at this time. Duplicate business on fall goods, the amount of which is variously estimated, is still to be placed, but there is little question in the selling market about these orders being received in adequate volume.

Talk Heavyweight Shortage

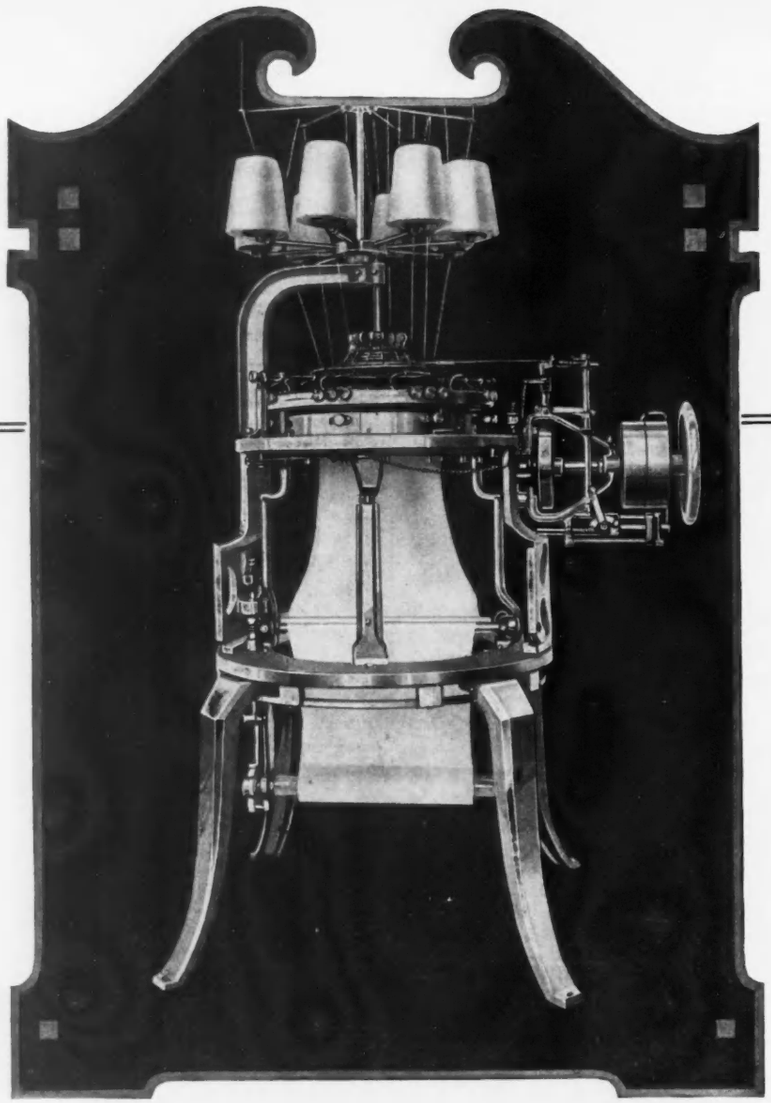
Usual predictions from selling agents of a shortage of heavyweights later on when the rush for immediate delivery starts seem to have more than usual foundation at this time. It is generally reported that jobbers' stocks are low, and there has certainly been a radical change in the retailer's attitude since the summer. A few days of cold weather will start an active scramble for goods, in the opinion of mill representatives, and the results of this scramble will not be altogether satisfactory to jobbers, it is predicted.

As an indication of the way the wind is blowing, it is understood that one of the largest Chicago retailers has been in New York recently, endeavoring to place orders direct with mill agents for merchandise needed in a hurry.

Lower Cotton?

The first reaction to the Government cotton crop report on Tuesday was surprise at the indicated yield of 11,015,000 bales, which was larger than had been expected. It is too early as this is written to get an intelligent idea of how the raw material market will react to the report. In the underwear market a number of selling agents feel that there will be no appreciable change in raw cotton prices as the result of the report; in a few sections the opinion is strong that despite all the bull propaganda present cotton prices cannot be maintained very much longer.

This waiting for 24-25c. cotton is understood to be responsible for considerable embarrassment to a number



Wildman Spring Needle Body Machine

There is a very real bond of sympathy between us and the manufacturers who seek to turn out a superior knit fabric.

Their efforts are directed just as ours are, not only in maintaining the high standards already achieved, but to improve them if possible.

The Wildman Spring Needle Body Machine embodies the newest and most highly perfected devices for assuring accuracy and uniformity of the product.

It handles all yarns perfectly and has proven to be superior in knitting both artificial and pure silk.

Let us send you an illustrated instruction book giving full information about Wildman Spring Needle Body Machines.

We have issued a very complete and informative book, "The Science of Knitting"—Price $3.00

TRADE MFG MARK

WILDMAN MFG. CO.

NORRISTOWN, PA.

Knit Goods Markets—Continued

of mills, but there apparently are not a few which are still willing to gamble to some extent on their opinion being confirmed before the end of the year.

Underwear Trade Notes

"The underwear situation," says the latest market letter of the National Wholesale Dry Goods Association, "might be summed up by saying that there seems to be no chance of any lower prices whatsoever, and a very good chance of advances all along the line." This letter is dated Oct. 1.

Other comment from the same source: "It is reported that the movement of fall underwear from the jobber to the retailer has shown a very decided improvement. In July and August the retailer was asking the jobber to hold up his shipments, or in some instances, cancelling orders. Since the advance in cotton and the cool snap that occurred a week or two ago, the retailer was very glad to take in his merchandise, and it is reported that in some cities he was very active in trying to buy more."

The rumor persists that another old-established manufacturer of balbriggans is to retire from the field.

As a result of action taken at the closing session of the convention of the National Association of Retail Clothiers and Furnishers, it is understood that retailers are planning to feature regular opening dates for underwear, the lightweight season opening on June 1 and ending on Sept. 30, when medium weights are to be worn. On Dec. 1 the public is expected to change to heavyweights, and go back to medium weights on April 1.

A number of adverse criticisms may logically be made against such an idea, but if it adds to the general publicity on underwear, more power to it.

Premiums Paid for Brushed Wool Goods

Many Lines Sold Up for Five Weeks — Indications of Production Catching Up

Faint indications are already appearing that the run on brushed coats for women may have passed its peak, so far as the primary market is concerned. A few manufacturers and jobbers selling the retail trade report that they are beginning to see the handwriting on the wall. Their business continues good, they say, but the scramble for goods on the part of the retailer is not as great as it was a short time ago. So far as the consumer is concerned, these sellers say, there is every reason to believe that the vogue for brushed effects will continue well into next spring.

The above is by no means a unanimous verdict, however. In other sections of the market it is claimed that the retailer is just as keen as he ever has been to get immediate delivery merchandise—that he is woefully short of desirable goods at this time, and is willing to pay any reasonable premium for delivery within a four or five-week period. Reports agree that few retailers, or jobbers either for that matter, will operate beyond five weeks ahead.

As an instance of the volume of business that is being done, and has been done for many weeks past, a manufacturer selling to the retail trade said this week that he had hoped his volume this fall would reach $1,500 a day, whereas he has been shipping at the rate of $4,000 a day for some time.

Spring sweaters for men are expected to be shown by manufacturers going to the retail trade direct about Nov. 15-Dec. 1, but there is not expected to be much action in women's goods before Dec. 15.

Bathing suit business continues to come in slowly, and selling agents seem reconciled to a continuance of this condition throughout the season.

Should reasonable prices be maintained on raw silk, good students in the neckwear business predict the largest pre-holiday business on record for knitted silk neckties.

OBITUARY

John Currie Wilmerding

John Currie Wilmerding, of the firm of Wilmerding, Morris & Mitchell, well known dry goods auctioneers and commission merchants, died last Sunday at his residence, Flushing, L. I., at the age of 72. Mr. Wilmerding was born at Moscow, N. Y., and was educated in Switzerland. Upon his return to this country he became connected with the firm of Wilmerding, Hoguet & Co. of which his father, Henry A. Wilmerding, was senior partner. This partnership was subsequently changed to Wilmerding, Morris & Mitchell. He retired about three years ago on account of illness, his son, Henry A., at the same time becoming a member of the firm. He is survived by a widow, three sons and a daughter.

Fred A. Tolhurst

Fred A. Tolhurst, for some time vice-president of the Tolhurst Machine Works, Troy, N. Y., makers of extractors, died suddenly at his home in Philadelphia last week at the age of 59 years. He was born in 1864, a son of William H. Tolhurst, who founded the machine company which bears his name in 1852. F. A. Tolhurst was connected for a time with the East Jersey Pipe Co. in the extractor department and was also associated with the development of the National Association of Hosiery and Underwear Manufacturers. His work with the Tolhurst Machine Works gave him a broad contact with the textile field. He retired from active

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"Leesona" is a mark indicating quality and service. It is not an advertising catch-word and is more than a mark of a machine or a group of machines, or the house-mark of an organization.

"Leesona" is the mark of a great Industrial Service known throughout the world, reaching every manufacturing process where perfect winding of thread, yarn, fibre or filament is essential.

Back of "Leesona" is an organization of winding Engineers,—the Universal Winding Company, with its main offices at Boston and branch offices in practically every important industrial community in the world, each equipped and ready to give that chief thing for which "Leesona" stands—SERVICE.

Machines bearing the "Leesona" mark have revolutionized many industries, reducing waste, lowering production costs, increasing production and improving quality.

As a result of the Service which is "Leesona" any manufacturer, in any field, who has a winding problem can call on the Universal Winding Company for a solution of that problem, with the assurance that his inquiry will receive the same attention that has made the "Leesona" mark famous in every corner of the globe.

UNIVERSAL WINDING COMPANY

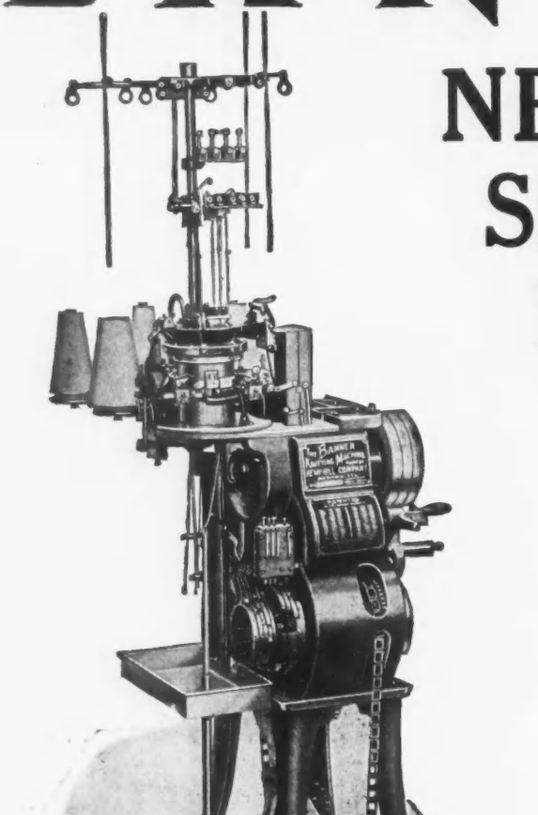
Providence, New York, Chicago. LEESONA REG. U. S. PAT. OFF. Philadelphia, Charlotte, Utica.

BOSTON

Montreal and Hamilton, Canada
DEPOTS AND OFFICES AT MANCHESTER AND PARIS

BANNER

NEW MODEL SPLIT-FOOT MACHINE



for making the highest quality of circular knit hosiery, doing away with all unsightly trimmed splicing yarns.

The leading hosiery mills of the country are using them in large quantities. It is a fast and economical producer and its product is the last word in circular knit hosiery.

Write for circular

HEMPHILL COMPANY

Main Office and Factory
PAWTUCKET, RHODE ISLAND

Southern Office
James Building
Chattanooga, Tenn.

New York Sales and Show Room
350 BROADWAY, NEW YORK

Philadelphia Office
Colonial Trust Bldg.
Philadelphia, Pa.

connection with the company several years ago.

Bernard Putman

Bernard Putman, 70 years old, retired glove manufacturer, died at his home in Johnstown, N. Y., last week, following a stroke of paralysis. He was born in Johnstown in 1853 and had lived in that city all his life. He retired from business about 20 years ago. He was one of Johnstown's pioneer glove manufacturers having started in business when 20 years of age. He is survived by a widow.

John S. Young

John S. Young, vice-president of J. S. Young & Co., Hanover, Pa., manufacturers of natural dyes and extracts, died Wednesday, Sept. 26, at the summer home of his parents, at Ventnor, N. J. Mr. Young was the son of Howard E. Young, president of the company. In 1902 he became secretary and treasurer of the company, on the death of his brother Edward. At the time of his death he was vice-president of the company. Much of his time was occupied in the affairs of their plant at Charlottesville, Va. Mr. Young had not been in good health recently, and had gone to Ventnor to recuperate when his death occurred suddenly. He is survived by his parents, and one sister, Mrs. Ward C. Haffner.

Business News

Opens Joint Offices

The Keene Silk Fibre Mills, of Keene, N. H., and the John T. Slack Corp. of Springfield, Vt., A. C. Bowman, president of both corporations, have opened joint offices at 236 Summer Street, Boston, formerly occupied by Dearborn Co., Inc., wool merchants. The rooms have been fitted up with new, up-to-date office equipment and arrangements have been made for the storing in convenient receptacles of the large line of recovered wools and silk wastes handled by these companies. A. H. Kendall will have charge of the affairs of the silk corporation and Lincoln S. Fifield will take care of the Slack Corporation business. The silk corporation will manufacture the "Keene" silk yarns made on the woolen system from garnetted silk wastes. These yarns, it is said, will come in between noil yarns and spun silk yarns and be particularly of value to woolen manufacturers. The yarns are dyed in a variety of fast shades and the company also dyes fast colors on spun silk yarns.

Norma Co. Places Contracts for New Plant

The Norma Co. of America has placed contracts for the erection of the first unit of its new plant upon its property recently acquired at Stamford, Conn.

This property consists of 17 acres of land facing the main line tracks of the New York, New Haven & Hartford Railroad adjacent to Glenbrook Station and the buildings now under construction will be of one story saw-tooth roof type occupying about 60,000 sq. ft. of space. The company's present plant at Anable Ave., Long Island City, will be continued for the production of Norma precision open type annular ball bearings.

The company's Stamford plant will be equipped for the manufacture of Hoffmann precision roller bearings, the American rights to which, as well as to all other Hoffmann products, were recently acquired by the company from The Hoffmann Mfg. Co., Ltd., of Chelmsford, Essex, England. The plant will also be equipped for the expansion of the manufacture of Norma precision ball bearings.

Francisco & Jacobus of 511 Fifth Ave., New York, are the company's architects and engineers and Post & McCord of New York are the company's general contractors for the erection of the new plant.

Park A. Dallis Removes Offices

Park A. Dallis, architect and engineer, Atlanta, Ga., has removed his offices from 6 West Harris St. to 1604 Candler Building. He has secured the services of Winton Flynn, who for a number of years was associated with the Engineering Department of the Southern Railway. Since the war, Mr. Flynn has been connected with the U. S. Shipping Board, and in the capacity of supercargo has visited Europe, the Far East, and other sections of the world.

Corporation Succeeds Partnership

Notice has been given the partnership existing between Augustus J. Loos and John J. Dilworth, trading under the names, Loos & Dilworth, the Phila. Silk Oil Co., and the Phila. Import and Distributing Co., was dissolved by mutual consent on Oct. 1, 1923. The business conducted by the partnership has been taken over by Loos & Dilworth, Inc., a Pennsylvania corporation at the former addresses, 132 S. Front Street and 131 S. Third Street, Philadelphia.

Awards Contract for New Building

The Multiple Winding Co., Malden, Mass., now occupying leased quarters on Center street, has awarded contract to the Aberthaw Company of Boston for a new two story building, 85′ x 70′, of brick, steel and wood construction, to be erected at the corner of Sherman and Abbott St. Building will be ready for occupancy January 1.

Mossberg Steel Addition

The Mossberg Pressed Steel Corporation, Attleboro, Mass., has just awarded the contract for an addition to its factory to take care of increased demand for its steel loom beam heads, section beam heads, adjustable beam heads, new process drop wires, etc.

War Dept. Personnel Change

WASHINGTON, D. C.—Major James L. Frink, chief of the sales promotion section of the office of the director of sales in the War Department, soon will be transferred to the industrial mobilization section of the war planning division of the department. The date of the change in personnel has not been fixed, although it was learned that Major Frink will be succeeded as chief of the sales promotion section by Capt. M. W. Clark, his assistant at present. Major Frink has held his present position for two years, succeeding Charles M. Willoughby.

"PARAMOUNT METHOD" FABRIC HOLDER

The PARAMOUNT Fabric Holder is one of the greatest developments in the art of finishing hosiery. It prevents the goods from creeping up during the drying process and the following advantages are all direct results of its use:

Uniformity of length.
No disfigurement of goods.
Less work for pairers.
Goods lie better in boxes.
Improved finish of the product.

PARAMOUNT FORMS and METHOD OF FINISHING have been developed to meet every requirement of correct finishing.

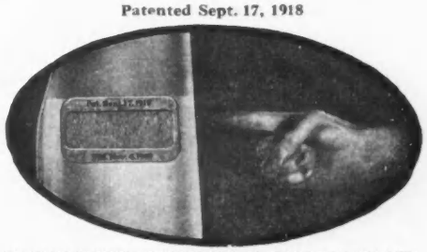
With PARAMOUNT EQUIPMENT you are assured of an increased selling value in your merchandise, greater production and fewer seconds. You will find a large saving in labor, steam and floor space, improved factory conditions and satisfied help. If interested, our representative will call, DEMONSTRATING IN YOUR OWN MILL WITH YOUR OWN PRODUCT the improved results obtained by finishing on Paramount Drying and Shaping Forms.

You can secure Paramount Equipment on either a Sales or Rental basis

Complete equipment can be seen in New York Office, 366 Broadway. Address all correspondence to Chicago Office

PARAMOUNT SERVICE GOES WITH ALL PARAMOUNT PRODUCTS

Patented Sept. 17, 1918



PARAMOUNT METHOD FABRIC HOLDER

Patented Nov. 4, 1919

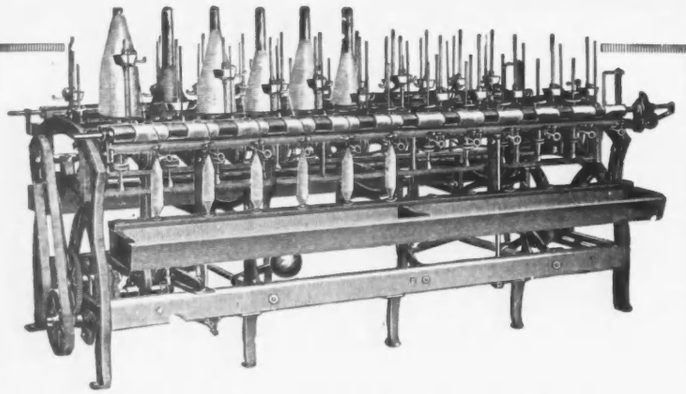
PARAMOUNT TEXTILE MACHINERY CO.

Formerly

PARAMOUNT HOSIERY FORM DRYINGCO.

Hunter Building

Market and Madison Streets, Chicago, Ill.



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Wind from Cop, Skein or Bobbin

Over 1,900 in use by Hosiery Manufacturers

IMPROVED UPRIGHT SPOOLERS

To Spool from Cop, Skein or Bobbin; Doubling Spoolers for Doubling two, three or more ends into one; Upright Quillers, Quill from Cop, Skein or Bobbin. Ring Dresser, Spooler and Reel Spindles, Cop Skewers, Spooler Guides, Bolsters and Steps Made and Repaired at Short Notice.

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(Est. 1865, Inc. 1903)

CHARLES W. PAYNE, Pres. CLINTON F. PAYNE, Sec'y and Treas.

CHARLES COOPER'S
Machine and Needle Works
BENNINGTON, VERMONT

G. H. ROGERS, Representative, 153 Ontario St., Albany, N. Y.

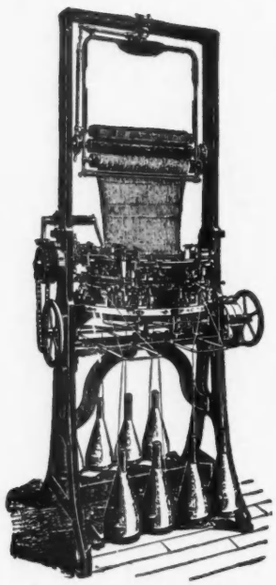
Spring and Latch Needle KNITTING MACHINERY

STANDARD FOR

Plain Ribbed, Circular and Flat Underwear
Shirt Cuffs
Drawer Bottoms

Rib Cuff Cutting Machines
Burr Wheels and Burr Blades
Balmoral Collarette Machines
Automatic Rib Cutting and Folding Machines

SPRING AND LATCH NEEDLES



Spring Needle Rib Top Machine

SOLE AGENTS FOR CHINA

ELBROOK, INC., 51 Kiangse Road, Shanghai, China

NEEDLES of QUALITY MACHINES of RECOGNIZED WORTH

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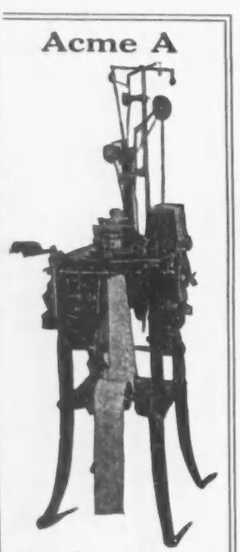

Revolving Cams

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ACME PRODUCTS

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Acme D

Revolving Needles

Ask those who use them

Acme Knitting Machine and Needle Co. Franklin, N. H.

Established 1870 Incorporated 1890

Get Repeat Orders by Using

Crane Spring and Latch Needle Knitting Machinery

SOME CRANE FEATURES

Patent removable hardened Wing Burr Wheels.
Patent Thread Stop Motion can be fitted to 20 in. and 32 in. frames and are specially adapted for making fine Jersey Cloth and Stockinet.
Our flat machine is adapted for knitting collarettes.

SPRING NEEDLE UNDERWEAR MACHINE WITH AUTOMATIC TAKE-UP

This machine is made in sizes from 13" to 26" in diameter of any desired gauge, the number of feeds depending on the size of cylinders. Also built in sizes from 2½" to 32" in diameter for the production of a great variety of fabrics.

Aside from the feeds for plain fabrics, the stockinet, elderdown and astrachan feeds are superior to any on the market.

IMPROVED AUTOMATIC COLORED PLAIN STRIPER

Made in sizes from 7⅝" to 20⅝" inclusive, of any desired gauge; these measurements being back to back of cylinder needles.
The fabrics from this machine are used for bathing suits, theatricals and athletic goods.
These machines are second to none on the market.
The Crawford stop-motion is applied when requested.

"It Pays to Use Good Machines and the Best Are None Too Good."—Our Motto

LET US SEND YOU FURTHER FACTS

CRANE MANUFACTURING CO., Lakeport, N. H.

SILK GOODS MARKETS

Broadsilk Activity Waits on Raw Silk

Sales Better as More Confidence Is Felt in Present Values—Prints for Spring

The situation in the broadsilk market was improved over the preceding week but is not yet all that might be desired. Buyers are in the market but are not placing many sizable orders. Uncertainty is the chief characteristic of the present situation and caution the watchword. The chief bone of contention is of course, prices. When first reports came through that the Yokohama market had opened below $9.00 a pound for raw silk, buying of finished silks came to an abrupt standstill. Now that it is more generally realized that these few inconclusive transactions in no way determined the actual market and with little Japan raw silk available at any price in this country, a distinctly firmer undertone is apparent.

Crepe-de-chines and georgettes are moving better than for some time both in the gray and finished. While it is impossible to obtain anything approaching replacement value for the raw that goes into the goods, prices are firmer. Cutters continue to use velvets and satins but the materials being used represent deliveries against old contracts for the most part. The chenille type of fabric remains in favor and seems likely to continue popular throughout the fall. Brocades in satin crepes and metals are being featured at retail and are wanted for spot delivery.

While few manufacturers are willing to accept orders for any length of time ahead in view of the uncertainty of the raw market, a few of the large houses who are fortunately situated as far as their raw needs are concerned either through good judgment or good fortune, are going right ahead with the showing of their spring lines. Prices represent advances of between 10% and 15% and the fabrics as a rule show a trend toward an increased combination of raw silk with other substitutes.

A strong revival of interest in prints has been witnessed recently and it is anticipated that next spring will be distinctly a print season. So far the designs have been confined to the less conspicuous florals and small group effects.

Raw Silk Outlook

According to a cable from Julean Arnold, Commercial Attache at Tokio, the indicatons are that Yokohama will ship during October one half of her normal export of silk.

Jealousies Prevent Silk Shipments

Yokohama Merchants Threaten Boycott of Importers Who Ship Raw Silk from Kobe—Prices Stronger

FROM the point of view of the silk trade here, the most important thing at present is an early resumption of shipments from Japan and the establishment of a free and open market. Raw silk has been going into consumption all during the current month, reducing the amount available in this country. Supplies arriving from other producing centers have been totally inadequate to meet the increasing shortage, and as far as can be ascertained all that Japan has shipped during this period is less than 1,600 or 1,700 bales, or about a day's consumption.

To counterbalance large purchases of materials abroad, Japan needs the balancing factor of large exports of raw silk. And how is this problem being met and solved? It is now over a month since the disaster and so far shipments have been negligible. Far from attempting to meet the situation in a broad way the rival Japanese ports are concerned mainly with petty squabbles as to where the silk shall be shipped from and not how soon. While this is going on, the user here a protest while the shortage grows.

Kobe Logical Port

Kobe is the logical port from which to resume shipments on a large scale, according to authorities. Practically all the large importers have branch offices there with staffs of clerks and as a general rule the managers of other importing houses located there after the destruction of Yokohama. The city has adequate warehousing facilities and enjoys uninterrupted communication with the interior. At the same time Yokohama is a mass of ruins. The harbor cannot be used by large ships which means that all goods loaded and unloaded will have to be lightered to and from the boats. Rail communication has been disrupted and the railroads will be taxed to the utmost to handle the reconstruction work necessary. As pointed out the proposal to bring silk from the interior by motor truck is hardly feasible for the reason that there are few motor trucks in Japan and those will be needed for other purposes. Yet it is reported on reliable authority that the raw silk commission merchants of Yokohama have issued an ultimatum that any importer shipping silk from Kobe will be boycotted.

Mystery Surrounds Transactions

That there have been additional settlements following the sales of the first three days has been definitely confirmed. A great deal of mystery still surrounds these initial transactions due to the reticence of the importers in giving out information. It is generally believed, however, that the silk sold represented bales undestroyed by the earthquake, and the prices arbitrary adjustments which may have to be revised later. Importers strongly deny that any free and open market exists. Small quantities of silk were offered early in the week for prompt shipment from Kobe but these offers were withdrawn later either because the total available was sold or the offerer feared the possible consequences.

It cannot be emphasized too strongly that what the American manufacturer wants now is not discussions but silk with which to run his looms. Only by getting it at the earliest possible moment can curtailment of operations be prevented. For mills to be run on a reduced schedule now means operatives thrown out of work, high prices, unstable markets and loss for all concerned. The question merits prompt, decisive and concerted action on the part of users through their representative body, the Silk Association of America.

SUMMARY OF SILK CABLES

Cable news from Japan is still infrequent and indefinite, and importers guard carefully the few cables they do receive. The Silk Association has recently received a cable stating that irregular trading had been resumed, but that no shipments were possible except saved bales of silk, and that normal shipments would be impossible for months. Another cable through the Department of Commerce at Washington stated that 1,600 bales had been shipped from Kobe since disaster, but that Kobe was now awaiting developments before establishing conditioning houses due to the threatened boycott by Yokohama dealers. The Shanghai and Milan markets remained firm during the week, with some quantities available in Milan for October shipment at about $10.40 for Grand Extra. The Canton market was strong throughout the week, with prices 60 cents a pound higher at the end, New Style 14/16 being quoted at $9.50 and New Style 20/22 at $9.10 for October-November shipment.

Ribbon Interest Now Centers on Narrows

Price Uncertainty Still Hampers Trading—Velvets and Metals Being Used

Continued uncertainty as to what should be a reasonable price level restricted sales of ribbons during the week. While caution still characterized the attitude of both buyer and seller a slightly firmer tone was noted due to the realization that the reports of the reopening of the Yokohama market were a bit premature. Sellers found difficulty, however, in getting a price for their merchandise. The familiar bugaboo of replacement value is again heard on every side, with the difference that in this particular instance it is perhaps more justified than in some cases in the past.

The ribbon trade will soon have to face the more serious consequences of the recent disaster. So far all has been well. The smaller manufacturer even found a certain pleasure at first in disposing of his merchandise at what seemed good prices. Even today he is working on merchandise that cost less than he can dispose of it for despite the existing difficulties. But soon all will be faced with the necessity of paying high prices for raw silk to make up new stock, or stopping manufacture.

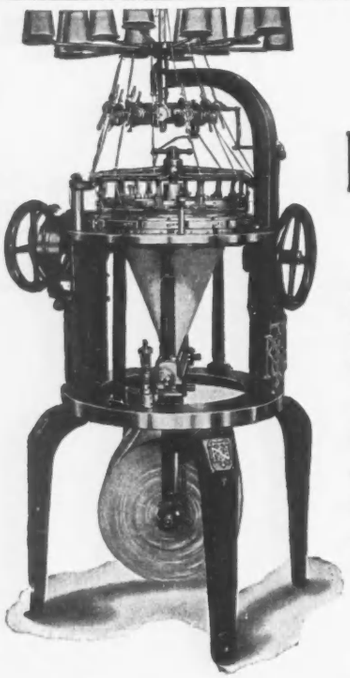
What demand there is confines itself mainly to the narrows. As one manufacturer put it, the only thing that is moving is a little velvets and tinsels in the narrow widths.

Raw Silk Strong

Local Market Advances Due to Scant Offerings

Trading was on such a restricted scale during the week that the limited transactions were indicative of nothing in particular. Such purchases as were made were forced by the sternest necessity for no manufacturer can hope to make money at present on silk bought above $10 a pound. The inability of the Japanese to ship any silk comparable with the needs of manufacturers here, is pointing clearly to a serious situation. The Japan grades for spot delivery were up about 50c. at the close with little silk available. XX A crack which could have been bought at $10.25 at the opening was firmly held at $10.75 later. Canton silks were strong with New Style 14/16 quoted at $9.60 for spot and 20/22 at $9.20. Prices are as follows:

	4 month basis
Japan Filature, XXA, 13/15	$10.80
Japan Filature, X, 13/15	10.40
Japan Filature, Best No. 1/x, 13/15	10.25
Canton Filature, New Style, 14/16	9.60
Canton Filature, New Style, 20/22	9.20
Italian Extra Classical (60-day basis)	10.75
Shanghai Steam Filature, equal to "Rayon d'Or."	10.75



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production and economical operation have combined to make NYE & TREDICK knitters popular for a generation in those mills where fabric of the highest quality is made at a price which assures satisfactory margins.

TRUMP BROS. MACHINE CO.

WILMINGTON DELAWARE

Successors to

NYE & TREDICK CO.

Cable Address—Trumpbro—Wilmington
Southern Agent—H. F. Booth, Cheraw, S. C.

Save Your Machines

The M & B Stop Motion is a definite factor in prolonging the life of sewing machines.

Its use means infrequent repairs and replacements. This device unerringly catches the knots which are so ruinous to the needles and small parts of the machine.

For Use On

Willcox & Gibbs Flatlock Machine

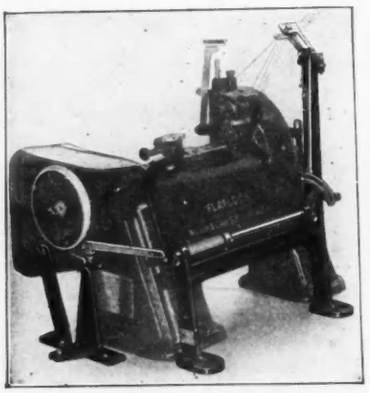
Merrow Shell Machine

Merrow Edge Machine

Write for details

The W.S. Mills Co.

80 Parallel St. Bridgeport, Conn.



M & B Stop Motion attached to Willcox & Gibbs Flatlock Machine.

M & B STOP MOTION

MERROWING

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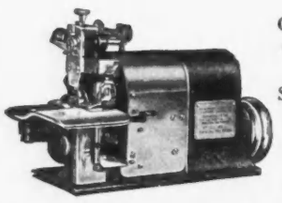

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MACHINES
FINISHING
FOR
ALL KINDS

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Granite State Needle Co.

George W. Mayo, Pres. and Treas.

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Manufacturers of

First Quality Latch Needles

For All Standard Makes of Machines
"We Make The Best"

A Specialty Made of Banner and Scott & Williams Latch Needles

NEEDLES BECKERT CONTINENTAL

For All Types of Knitting Machines

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Successor to CONTINENTAL LATCH NEEDLE CO.

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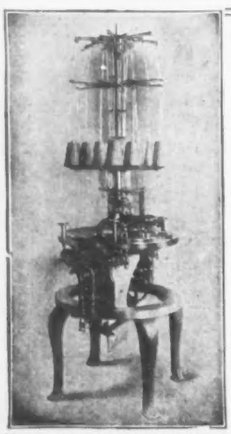

SWEATER MACHINE

Sweater and Toque Machinery

We announce to the knit goods trade that both our new Latch Needle Sweater and Toque Machines, after severe and protracted tests, have proven unqualified successes.

Sweater machines knit plain, half, and full cardigan, stripe, rack and have separating course.

Toque machines automatically stripe three colors on ribbed fabrics.

TOMPKINS BROS. CO.

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Established 1846

New Jersey Textile **Wire Stitcher**

Highest Grade

Machine for rapid and Economical Method of Attaching Rider tickets to Hosiery or other Garments.

Uses pointed staples, cannot tear the finest fabric

Send for Catalogue

J. L. Shoemaker & Co., 15 S. Sixth Street PHILADELPHIA

PROMPT SERVICE
RIGHT PRICES

BONE DRY
HOSIERY FINISHING BOARDS

THAT WORK ABSOLUTELY SMOOTH

Jos. T. Pearson & Sons Co.

1825 E. Boston Ave. Philadelphia, Pa.

L. T. IVES CO.

Established 1874 Manufacturers of all kinds of

Spring Knitting Needles

Slides, Sinkers, Jacks, Etc.

NEW BRUNSWICK, N. J.

FINANCIAL MARKETS

Textile Securities in Better Demand

Increase in Investment Interest in Sympathy with the Greater Activity and Firmness

BOSTON, Oct. 3.—The improved investment interest that has been noted in textile securities during the last two weeks has been expanded by the sympathetic effect of increased activity and firmness in the stock market. Such listed shares as American Woolen have been quick to respond to the general upward trend, while Pacific and Amoskeag have held firm at recent prices. Amoskeag, in fact, has shown a tendency to advance from its recent low of 76, despite the discouraging showing for its last fiscal year. Pacific remains unchanged for the week at 88 although in the interim it has sold as low as 87. Today's auctions were featured by an increased demand for the textile stocks offered, this being a reflection of the recent character of private transactions; such few declines as have taken place in high-grade textile shares have been little more than fractional, while several substantial advances are reported. There is no longer any doubt but that the worst features of the textile business situation have been fully discounted, and that there must be a substantial improvement in business during the next few months if not into next year.

The Amoskeag Statement

The annual report of the Amoskeag Mfg. Co. for the fiscal year ended June 2 last shows a deficit of $75,483 before dividends as compared with a net profit of $648,087 for the year ended May 28, 1922. This compares with record net profits of $7,944,945 for the fiscal year 1919. At the annual meeting held in Manchester, N. H., Wednesday, Treasurer F. C. Dumaine furnished some detailed figures additional to those contained in the regular production statement. He stated that the amount of cotton goods on hand at the end of the fiscal year was 24,634,000 yards, against 4,836,000 yards the year before, and the amount of worsted goods on hand was 934,000 yards, against 420,000 the year before. Of the total production during the year, 110,353,000 yards was cotton cloth and 6,186,000 yards worsted cloth. In explanation of the loss for the year it was stated that the period covered a complete shutdown of the works, owing to the strike, for six months. It was not until January of this year that normal manufacturing was resumed. Explaining the balance sheet, Mr. Dumaine said that the investment item, $28,000,000, was entirely Liberty bonds. The inventory amounted to $3,867,565; cash and accounts receivable, $13,880,603. The Stark Mills purchase was concluded and all federal tax differences adjusted during the period. These factors presumably account for the increase in the floating debt. Regarding the future, Treasurer Dumaine said: "I cannot give a very encouraging idea of the outlook. It appears as though we were entering a period in which it would be difficult to dispose of all the company's products."

The income account for the year ended June 3, 1923, compares as follows with the years ended May 28 1922 and 1921:

	1923.	1922.	1921.
Re. for sales	$22,162,477	$24,838,805	$31,287,074
Cost of mfg.	24,454,345	23,449,925	28,984,549
Chge. of inv.	*2,216,384	†740,792	†1,029,877
Profits	‡$75,483	$648,087	$1,272,647
Dividends	2,005,200	2,523,600	2,523,600
Deficit	$2,080,633	$1,875,513	$1,250,953

* Increase. † Decrease. ‡ Deficit.

The balance sheet as of June 2, 1923, compares as follows:

Assets.		
Real estate, mach., etc.	$3,000,000	$3,000,000
Mdse. cash and accts. rec. and Liberty bonds	46,648,509	35,680,283
Total	$49,648,509	$38,680,283
Liabilities.		
Bills and accts. payable	$16,350,000	$6,250,000
Prof. and loss res.	33,298,509	32,430,283
Total	$49,648,509	$38,680,283

Production and sales by years compare as follows:

	Cotton & worsted goods		Cotton bags	
Year.	Yds. produced.	Yds. sold.	Produced.	Sold.
1923	116,539,617	96,228,411	.....	.....
1922	132,576,849	138,117,958	.....	.....
1921	147,548,074	146,934,297	11,754	82,114
1920	160,566,549	161,450,504	700,985	662,735
1919	143,209,122	139,696,222	630,848	632,048
1918	171,515,440	183,694,347	1,227,102	1,199,868
1917	202,872,967	200,223,653	1,203,335	1,209,554
1916	200,576,754	201,552,242	1,713,339	1,715,817
1915	213,983,728	217,683,396	1,491,042	1,487,466
1914	235,049,159	229,633,588	1,179,295	1,169,408
1913	231,594,445	231,740,421	823,508	864,945

Boston Stock Auctions

The following sales of textile shares were made at Wednesday's auctions:

Shares.	Mill.	Par.	Price.	Chge.
80	Hamilton Mfg. Co.	100	63⅜	— ⅛
4	Bates	100	235¼	—3¼
2	Everlastik, Inc., pfd., Class A.	100	30	+5
5	Rheabat Corp., com.	100	10	...
10	Everlastik, Inc., pfd., Class B.	100	25¼	...
14	Naumkeag	100	295	...
5	West Point	100	127½	+½
20	Arlington	100	102½	+2⅝
8	Bigelow Hartford, pfd.	100	114¼	— ⅛
7	American Mfg., pfd.	100	81	— ¼
17	American Mfg., com.	100	99¼	— ¾

172 Total.

Fall River Strong

Extra Dividends Arouse Interest from Investors

FALL RIVER, MASS.—The local mill stock market has continued strong, though somewhat less active than during the early part of September when rumors of possible extra dividends were upon the street. The activity became marked immediately following the announcement of a 25% extra dividend by the King Philip mills, and the Luther Mfg. Co. and the Pilgrim mills came through with extras though not so sizable as that of the King Philip. The Luther paid 10% extra and the Pilgrim paid 1% extra on both common and preferred stock.

Barring the possibility of further extra dividends the business situation seemingly warrants the better feeling toward the local mill stocks than at any time during the last year and particularly toward those of the mills which are known to have sufficient surplus to weather the dull period without suffering. Whether or not the heavy curtailment of the plain goods mills during the summer aided in bringing about the improved conditions of to-day, it admittedly did away with operating at a loss as would have resulted. The fine goods operated in full, some even running overtime throughout the summer and they made some money. The mills as a whole have not returned to normal production as yet, but they are much nearer to it than at any time during the year and cloth prices have been advanced to a point to make the outlook for the future much brighter providing the cost of raw material does not continue soaring.

The week's trading has been confined mainly to issues of the Barnard, Lincoln, Stevens and Wampanoag though sales of Flint and American Linen have been quoted. Flint brought 168 and more is being sought at the same price. Barnard again changed hands at 110 and Lincoln again sold for 120. Sales of American Linen at 75 and Wampanoag at 102 show no change from recent high prices for either of the two issues. Considerable demand has developed for Stevens shares of late and sales are quoted by different brokers during the week at 150, the sale price already quoted at recent date.

The only changes noted in quotations for the week are an advance in bid price for Bourne from 147 to 148; for Charlton, 130 to 135; for King Philip, 160 to 170; for Tecumseh, 150 to 155, and for Parker, common, 40 to 45.

New England Textile Stocks

Quotations based upon last sales at Boston public auction and Boston Stock Exchange.

	Latest Sales.	Previous Sales.
American Woolen, pfd.	101½	101
Amoskeag	76	76½
Androscoggin	160	165
Appleton	720	760
Arlington	102½	100⅛
Bates	235¼	238½
Bigelow-Hartford, pfd.	119¼	114⅛
Boott	135½	...
Edwards	115	110
Esmond, pfd.	98½	101
Everett	170⅛	180
Farr Alpaca	188¼	186⅛
Great Falls	50⅜	50⅛
Hamilton Woolen	95⅞	95⅜
Hamilton Mfg.	62⅜	63
Hill	150⅞	149
Int. Cotton, pfd.	57	57
Ipswich, com.	40	42
Lawrence	82	104
Ludlow Associates	145	144
Lyman	166⅛	170
Massachusetts	152¾	150¼
Merrimack	100⅛	99⅝
Nashua, com.	73⅝	74⅛
Naumkeag	295	296
Newmarket	140	135
Pacific	88	88
Plymouth Cordage	106¼	160⅛
Tremont & Suffolk	139⅛	155⅛
York	122	136⅛

Miscellaneous Shares

Reported by M. H. Wildes & Co., Inc., Boston, Mass.

	Bid	Asked
Arlington Mills	102	105
Bates Mfg. Co.	235	245
Bigelow-Hartford, com.	155	160
Brookside Mills	175	185
Columbus Mfg. Co.	125	135
Dwight Mfg. Co.	97	102
Edwards Mfg. Co.	100	105
Everett Mills	165	170
Farr Alpaca Co.	200	205
Gluck Mills	125	130
Great Falls Mfg. Co.	50	53
Hamilton Mfg. Co.	62	65
Hamilton Woolen Co.	94	99
Lancaster Mills, com.	125	130
Lancaster Mills, pfd.	102	105
Lanett Cotton Mills	135	..
Lawrence Mfg. Co.	85	90
Lowell Bleachery	130	135
Ludlow Mfg. Associates	143	146
Lyman Mills	175	180
Massachusetts Cotton Mills	153	156
Merrimack Mfg. Co., com.	100	103
Merrimack Mfg. Co., pfd.	78	81
Nashua Mfg. Co., com.	75	..
Nashua Mfg. Co., pfd.	98	100
Naumkeag Steam Cotton Co.	295	300
Pepperell Mfg. Co.	138	142
Plymouth Cordage Co.	107	109
Tremont & Suffolk Mills	125	130
Waltham B. & D. Works	125	..
Warwick Mills	..	100
West Point Mfg. Co.	124	129
York Mfg. Co.	121	124

New Bedford Quotations

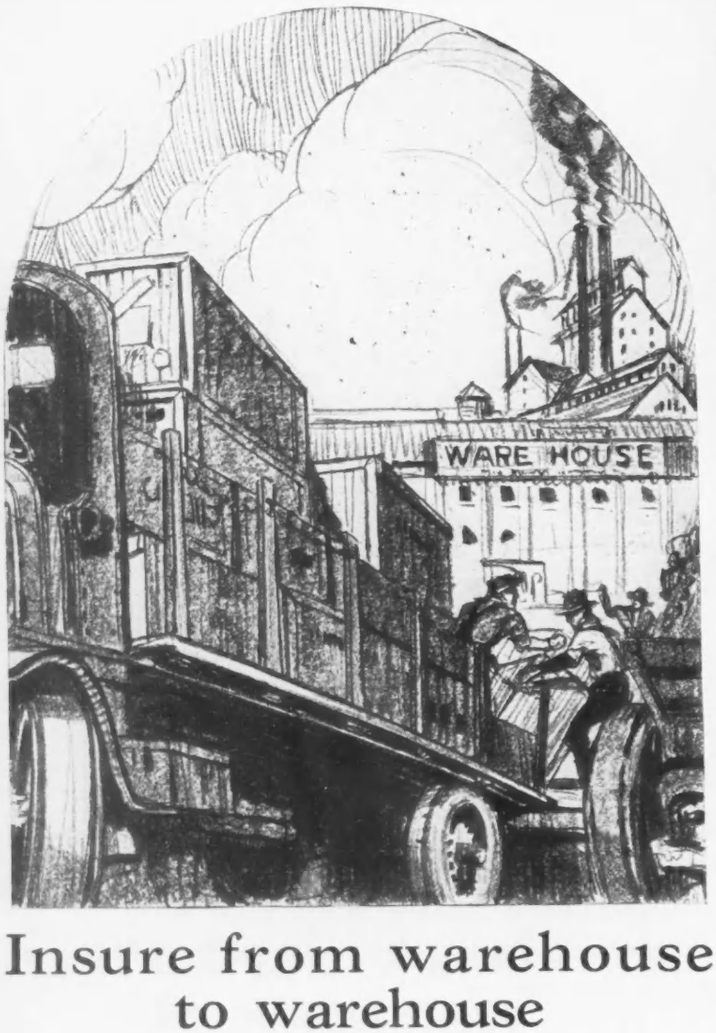
Quotations furnished by Sanford & Kelley.

	Bid.	Asked.
Acushnet Mills	122½	..
Beacon Mfg. Co., pfd.	100	..
Booth Mfg. Co., com.	170	..
Booth Mfg. Co., pfd.	114	..
Bristol Mfg. Co.	..	190
Butler Mfg. Co.	130	..
City Mfg. Co.	130	..
Dartmouth Mfg. com.	155	..
Dartmouth Mfg. Co., pfd.	83	..
Fairhaven Mills, pfd.	..	90
Fairhaven Mills, com.	..	92⅛
Gosnold Mfg. Co., com.	132	..
Gosnold Mfg. Co., pfd.	94	..
Grinnell Mfg. Co.	132½	..
Hathaway Mfg. Co.	150	..
Holmes Mfg. Co., com.	..	390
Holmes Mfg. Co., pfd.	112¼	..
Kilburn Mills	155	165
Manomet Mills	..	65
Nashawena Mills	140	..
Neild Mills	230	..
N. B. Cotton Mills.	105	..
N. B. Cotton Mills, pfd.	97½	..
Nonquitt Spinning Co.	..	80
Pierce Mills	485	..
Potomska Mills	..	125
Quissett Mills, com.	..	210
Quissett Mills, pfd.	100	..
Sharp Mfg. Co., com.	62½	..
Sharp Mfg. Co., pfd.	80	..
Soule Mills	195	..
Taber Mills	..	120
Wamsutta Mills	102½	..
Whitman Mills	152½	..

Fall River Mill Stocks

Quotations furnished by G. M. Haffards & Co.

	Bid.	Asked.
American Linen Co.	74	78
Arkwright Mills	40	..
Barnard Mfg. Co.	110	112
Border City Mfg. Co.	100	105
Borden Mfg. Co., Richard	130	140
Bourne Mills Co.	148	..
Chace Mills	90	..
Charlton Mills	135	..
Cornell Mills	165	..
Davol Mills	107	..
Davis Mills	..	106
Flint Mills	160	170
Granite Mills	102	110
King Philip Mills	170	..
Laurel Lake Mills, com.	..	40
Lincoln Mfg. Co.	115	..
Merchants Mfg. Co.	145	155
Mechanics Mills	105	110
Narragansett Mills	130	..
Osborn Mills	95	100
Parker Mills, com.	45	..
Parker Mills, pfd.	..	100
Pilgrim Mills, com.	..	..
Pilgrim Mills, pfd.	105	..
Pocasset Mfg. Co.	70	..
Sagamore Mfg. Co.	280	..
Seaconnet Mills	30	35
Shove Mills	80	..
Stafford Mills	90	95



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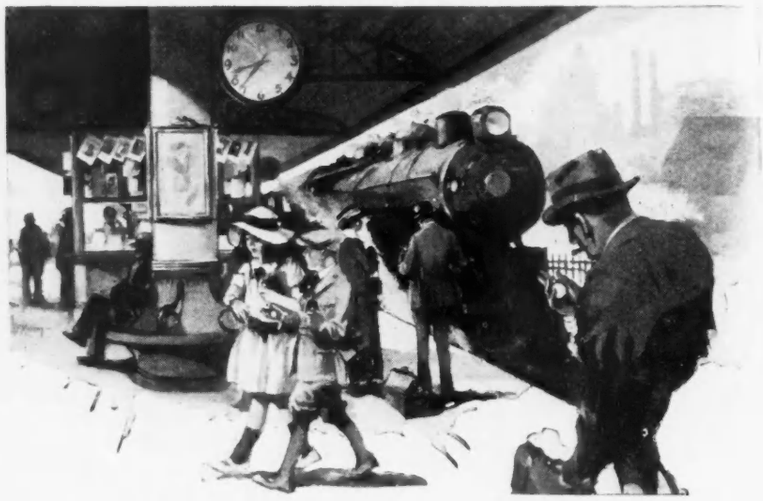

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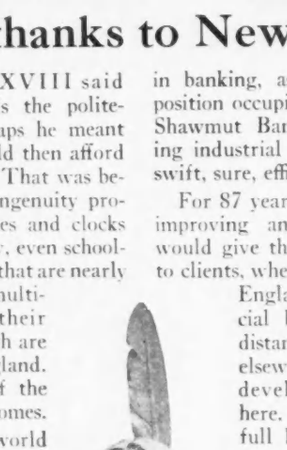

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Financial Markets—Continued

Stevens Mfg. Co.	145	152
Tecumseh Mills	155	..
Troy C. & W. Manuf'g	..	400
Union Cotton Mfg Co.	153	..
Wampanoag Mills	100	..
Weetamoe Mills	..	95

N. Carolina Textile Stocks

(Taken from list of Southern Mill Stocks quoted by R. S. Dickson & Co., Gastonia, N. C., and Greenville, S. C.)

	Bid	Asked
Acme Spinning Co.	110	..
Am. Yarn & Processing Co.	110	..
Am. Yarn & Processing Co., 8% pfd.	103	106
Arlington Cotton Mills	124	131
Arrow Mills	100	106
Cabarrus Cotton Mills	150	..
Cabarrus Cotton Mills, pfd.	104	108
Cannon Mfg. Co. (par $10)	16¼	..
Chadwick-Hoskins Co. (par $25)	**19**	**23**
Chadwick-Hoskins Co., 8% pfd.	105	107
China Grove Cotton Mills	105	110
Clara Mfg. Co.	95	100
Climax Spinning Co.	160	170
Clover Mills	97	101
Crescent Spinning Co.	115	125
Dixon Mills	118	..
Durham Hosiery, 7% pfd.	60	67
Durham Hosiery, "B"	10	13
Eagle Yarn Mills	89	91
Eastern Mfg. Co.	..	97
Efird Mfg. Co.	145	156
Erwin Cotton Mills Co.	**130**	..
Erwin Cotton Mills Co., 6% pfd.	**102**	**104**
Flint Mfg. Co.	**149**	**161**
Gibson Mfg. Co.	125	..
Globe Yarn Mills (N. C.)	60	65
Gray Mfg. Co.	**125**	..
Hanes, P. H., Knitting Co.	12	13
Hanes, P. H., Ktg. Co., 7% pfd.	**104**	**107**
Henrietta, 7% pfd.	**100**	**100**
Imperial Yarn Mills	145	151
Jennings Cotton Mills	255	..
Linford Mills	100	102
Locke Cotton Mills Co.	**165**	..
Lola Mfg. Co.	**100**	**110**
Majestic Mfg. Co.	165	175
Mansfield Mills	174	..
Mooresville Cotton Mills	..	121
Myers Mill	**65**	**71**
National Yarn Mill	**140**	**151**
Parkdale Mills	116	121
Perfection Spinning Co.	101	105
Priscilla Spinning Co.	..	60
Ranlo Mfg. Co.	119	126
Rex Spinning Co.	**..**	**71**
Rex Spinning Co., 7% pfd.	67	76
Rhyne-Houser Mfg. Co.	93	100
Roanoke Mills, 7% 1st pfd.	100	104
Roanoke Mills, 8% 2d pfd.	..	98
Rosemary, 7½% pfd.	97	99
Rowan Cotton Mills Co.	97	101
Seminole Cotton Mills Co.	104	..
Sterling Spinning Co.	120	..
Stowe Spinning Co.	94	98
Victory Yarn Mills Co.	87	91
Victory, 8% pfd.	**102**	**103**
Winget Yarn Mills Co.	74	81
Wiscasset Mills Co.	170	..

Southern Cotton Mill Stocks

Quotations furnished by A. M. Law & Co., Inc., Spartanburg, S. C.

	Bid.	Asked.
Abbeville Cotton Mills	110	..
American Spinning Co.	..	285
Anderson Cotton Mills	124	127
Aragon Mills	160	..
Arcade Cotton Mills	97	101
Arcadia Mills	280	300
Arkwright Mills	130	..
Augusta Factory, Ga.	55	60
Avondale Mills, Ala.	700	..
Banna Mills	50	..
Beaumont Mfg. Co.	365	376
Belton Cotton Mills	62	65
Belton Cotton Mills, pfd.	94	96
Bibb Mfg. Co.	170	175
Brandon Mills, pfd.	99	101
Brogon Mills	..	121
Calhoun Mills	135	140
Chesnee Mills	160	170
Chiquola Mills	260	..
Chiquola Mills, pfd.	91	93
Clifton Mfg. Co.	148	151
Clinton Cotton Mills	200	..
Columbus Mfg. Co., Ga.	**130**	**136**
Cowpens Mills	92	98
D. E. Converse Co.	138	142
Dallas Mfg. Co., Ala.	165	200
Darlington Mfg. Co.	97	100
Drayton Mills	100	..
Dunean Mills	134	137
Dunean Mills, pfd. (new Issue)	100	100
Eagle & Phenix Mills, Ga.	155	..
Enterprise Mfg. Co., Ga.	90	95
Gaffney Mfg. Co.	163	165
Gainesville Cotton Mills, Ga.	165	175
Glenwood Mills	162	..
Gluck Mills	125	129
Graniteville Mfg. Co.	170	..
Greenwood Cotton Mills	400	..
Grendel Mills	150	..
Grendel Mills, pfd.	49	50
Hamrick Mills	140	147
Hartsville Cotton Mills	185	..
Inman Mills	160	..
Inman Mills, pfd.	102	..
Jackson Mills	210	230
Judson Mills	174	..
Judson Mills, pfd.	101½	..
King, John P., Mfg. Co., Ga.	175	..
Laurens Cotton Mills	145	..
Limestone Cotton Mills	..	150
Marion Mfg. Co., N. C.	125	136
Marlboro Mills	85	87
Mills Mill	**285**	**300**
Mollohon Mfg. Co.	136	140
Monarch Mills	144	..
Musgrove Cotton Mills	92	95
Newberry Cotton Mills	143	146
Ninety-Six Mills	150	..
Norris Cotton Mills	97	100
Oakland Cotton Mills	137	141
Orr Cotton Mills	125	127
Orr Cotton Mills, pfd.	98	100
Pacolet Mfg. Co.	210	..
Pacolet Mfg. Co., pfd.	102	..
Panola Cotton Mills, Class A, pfd.	94	95
Panola Cotton Mills, Class B, pfd.	93	96
Pelham Mills	35	42
Pickens Cotton Mills	141	..
Piedmont Mfg. Co.	..	175
Poe, F. W., Mfg. Co.	148	150
Polnsett Mills	118	121
Riverside Mills (Par $12.50)	10	11
Saxon Mills	115	118
Sibley Mfg. Co., Ga.	..	68
Spartan Mills	..	176
Toxaway Mills (par $25)	36	37½
Union-Buffalo Mills	**96**	**98**
Union-Buffalo Mills, 1st pfd.	**96**	**97**
Union-Buffalo Mills, 2d pfd.	59½	60½
Victor-Monaghan Company	130	132
Victor-Monaghan Company, pfd.	..	118
Ware Shoals Mfg. Co.	195	200
Watts Mills	**60**	..
Watts Mills, 1st pfd.	101	..
Watts Mills, 2d pfd.	135	138
Whitney Mfg. Co.	108	110
Williamston Mills	180	..
Woodruff Cotton Mills	180	..
Woodside Cotton Mills	144	146
Woodside Cotton Mills, pfd.	95	97

Luther Pays Extra Dividend

FALL RIVER, MASS.—The Luther Mfg. Co. paid an extra cash dividend of $10 per share on Saturday, Sept. 29, thereby making the dividend rate for the fiscal year 18%. The corporation had already paid a regular quarterly dividend of 2% for the year. The extra dividend was declared at a special meeting of the directors held in the middle of the month but announcement of the dividend was withheld until the checks had been deposited in the mail. The action of Luther, following so close upon that of King Philip's payment of a 25% extra dividend, has caused no small amount of comment in view of the fact that both of the corporations are seeking an abatement of their city taxes for 1921. The Pilgrim mills is the only other local corporation that has declared an extra dividend during the present year. The Pilgrim declared an extra of 1% on both common and preferred stock.

British Mill Dividends

(From Our Regular Correspondent)

MANCHESTER, ENG., Sept. 18.—Of 15 Lancashire cotton spinning companies with a paid-up ordinary share capital of £1,437,547 and 1,223,160 spindles, eight have not declared a dividend for the August quarter but five paid 5% per annum and one each 8% and 20%, absorbing £13,707. The average for the 15 companies is 3.53, the same as in May, compared with 3.87 in February, 4.78 in November and 7.07 in August, 1922. An average of 1.25 was paid by 10 companies for the half year ended August, against 1% and 2% per annum respectively for February and August last. Eight could not pay anything, but one paid 2½% and another 10% requiring £10,750. The total paid-up ordinary share capital of the ten concerns is £1,640,000 and the total spindleage 1,048,192.

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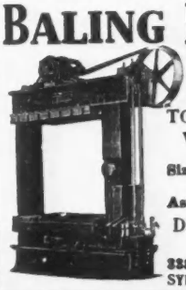
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THE PARKDALE MILLS, INC.

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COTTON YARN MARKETS

Prices Unchanged by Government Estimate

Issuance of Report Thought Likely to Be a Stimulating Influence Upon Buyers

NEW YORK.—The Government report on Tuesday acted as rather a damper upon the enthusiasm of buyers in the yarn market, but it is not expected that it will have a continued effect of an unsatisfactory character. While the estimate of the crop based upon the condition report was larger than a good many expected, yet the comparatively small amount of cotton ginned leaves a margin of possibilities that may be affected by rain and early frost within the next month. Besides this it is appreciated that consumption of 12,000,000 bales will mean a carry-over that will be dangerously small and that may very possibly result in considerably higher prices for raw material. It is also felt that the issuance of the report in itself will act as an element of stability. Buyers for two or three weeks have been awaiting these figures and have been delaying operations until something definite was known. Now that it is a matter of history, it is believed likely that yarn consumers will go ahead planning for their future and providing for yarns on the best basis possible.

Spinners' Attitude Little Changed

At this writing the decline following the issuance of the report has not been sufficient to alter the asking prices of spinners. The fact that the majority have taken business for 30 or 60 days is sufficient to maintain the firmness recently exhibited in asking prices. The few telegrams which have been received up to date show no disposition to make any concession from the level established within the last two or three weeks. There may be a few isolated exceptions to this rule and reports of one or two cases where spinners have offered to sell yarn at a cent below recent quotations have been current. Nevertheless, efforts to bear the spinner as a result of the immediate decline have been almost without exception unsuccessful. The firmness of quotations has been necessitated by the narrow margin of profit based on recent high prices, this margin in many instances reaching practically the vanishing point. Therefore, unless the spinner finds that his stand on prices means an absolute cessation of business, he will do his utmost to maintain recent figures in order to secure if possible a more profitable basis of trading. In this attitude he is strengthened by the fact that there is a comparatively small stock of yarns in dealers' hands and that the selling price approximates

(*Continued on page* 149)

COTTON YARN QUOTATIONS

(Corrected at close of business Wednesday)

Carded—(Average Quality)

Single Skeins—Warp Twist

4s to 8s	42	—	20s	49	—50
10s	43	—	24s	51	—52
12s	44	—	26s	52	—53
14s	46	—	30s	54	—55
16s	45½	—	40s	65	—

Two-Ply Skeins and Tubes

8s-2	—	—43	24s-2	52	—53
10s-2	44	—45	26s-2	53	—54
12s-2	45	—46	30s-2	54	—55
14s-2	46	—47	36s-2	62	—63
16s-2	48	—49	40s-2	66	—67
20s-2	50	—52	40s-2 high	68	—70

Single Warps

10s	—	—45	24s	—	—52
12s	—	—46	26s	—	—53
14s	—	—47	30s	—	—56
16s	—	—48	40s	—	—65
20s	50	—51			

Two-Ply Warps

8s-2	—	—44	24s-2	52	—53
10s-2	—	—45	26s-2	54	—55
12s-2	—	—46	30s-2	55	—56
14s-2	—	—47	40s-2 ord.	—	—66
16s-2	—	—49	40s-2 high	68	—70
20s-2	50	—52	50s-2	—	—

8s-3 and 4-ply skeins and tubes; tinged 39-40c.; white 43-44c.; 10s-2 and 12s-2 slack twist, 45-46c.

Hosiery Cones (Frame Spun)

8s	—	—44	22s	48½	—49½
10s	44	—45	22s Jaeger and silver	—	—50
12s	—	—45½	24s	49	—50
14s	—	—46	26s	—	—50
16s	—	—46½	30s tyeing in	—	—52
18s	—	—47	30s extra quality	55	—56
20s	48	—49	40s	—	—63

Combed Peeler—(Average Quality)

Warps, Skeins and Cones

20s-2	62	—63	50s-2	85	—90
30s-2	68	—70	60s-2	95	—1 00
36s-2	75	—77	70s-2	1 05	—1 10
40s-2	—	—80	80s-2	1 15	—1 20

Singles

12s	53	—54	30s	66	—68
14s	54	—55	36s	76	—77½
16s	55	—56	40s	78	—80
18s	57	—58	50s	85	—90
20s	58	—59	60s	95	—1 00
24s	61	—62	70s	1 05	—1 10
28s	63	—65	80s	1 15	—1 20

Mercerized Cones (Combed, Ungassed)

26s-2	80	—85	50s-2	1 05	—1 10
30s-2	85	—90	60s-2	1 15	—1 20
36s-2	92	—97	70s-2	1 27	—1 37
40s-2	96	—1 00	80s-2	1 40	—1 50
45s-2	1 00	—1 05			

Eastern Peeler

Single Cones

	Carded		Combed			Carded		Combed	
10s	45	—46	54	—56	26s	52	—53	64	—66
14s	47	—48	56	—58	30s	56	—57	68	—72
16s	48	—49	57	—59	36s	60	—75	75	—80
18s	49	—50	58	—60	40s	65	—70	78	—83
20s	50	—51	60	—62	50s		—	85	—90
24s	51	—52	62	—64	60s		—	95	—1 00

Combed Cones, Warps and Tubes

20s-2	60	—65	50s-2	85	— 90
30s-2	70	—75	60s-2	95	—1 00
36s-2	76	—80	70s-2	1 05	—1 10
40s-2	80	—85	80s-2	1 20	—1 25

Buyers Still Wait on Cotton Yarns

Government Report Causes Little Change Thus Far—Stock Lots Sold

PHILADELPHIA.—Yarn buyers have been marking time pending analysis of the government crop report and its effect upon cotton prices. There has been a slight softening of prices of carded yarns during the week from recent top figures. Most of the yarn purchased at the lower quotations, however, is reported to be from stock and not the result of lower spinners' quotations. Buyers have felt that cotton quotations and yarn prices have reached a level which discounts the smallest crop possible this year. They believe cotton will become easier due to a larger crop than the majority of private forecasts predict, with a resultant effect upon yarns. For these reasons buyers have been hesitant in placing orders for more than they actually need for the last two weeks. The Government estimate of 11,015,000 bales on Oct. 2, was larger than the average of several private reports and buyers of yarns believe their waiting policy will bear fruit in the immediate future. Carded yarns have been in spotty demand, with spinners' quotations remaining firm. Combed qualities are without general activity, with higher prices now being asked for the finer counts. Mercerized yarns have remained stationary, due to a lull among buyers of these yarns, after last week's increase in quotations.

Stock Lots Low

Several holders of stock lots of yarn in this market have quoted under spinners' prices in order to dispose of part of their stock. Many believe the softer tendency noted has been due solely to this fact, and not the result of lower figures from spinners, who generally refuse to quote lower to attract orders. They do not look for permanently lower cotton and believe manufacturers are without sufficient volume of yarns to cover their orders. Spinners are asking 52 to 55c. for 20s-2 warps, several sales of this count have been noted at 51 to 52c. in this market. An order for a small quantity of 30s-2 warps was placed with one spinner at 56c., while 30s-2 skeins have been sold from stock for 55c. for which spinners ask 1c. more. Single warps have been sold on a basis of 47c. for 14s-1, which is the figure at which spinners will take orders.

Carded Knitting Yarns Move

Knitting yarns, particularly 20s-1, carded, 30s-1 carded and double carded, have been sold in large amounts. A wide range has been re-

ABERFOYLE MANUFACTURING COMPANY

MERCERIZED YARNS

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EMPIRE BUILDING
PHILADELPHIA

ADAMS-FRANKLIN BUILDING
CHICAGO

WESTAWAY BUILDING
HAMILTON, CANADA

MILLS
CHESTER, PA.

Cotton Yarn Markets—Continued

ported in the selling prices of 20s, one dealer selling this yarn at 47c., with slightly better yarn bringing 1c. more. Spinners are asking 48 to 50c. for this number, another dealer selling 10,000 lbs. at the higher figure, with a smaller lot of 26s cones at 53c., although this was admitted to be above the average in quality. Several large orders for 30s-1 double carded cones have been placed by hosiery and underwear mills at prices varying from 54 to 56c., one factor reporting the sale of 10,000 lbs. at the lower price. Other dealers have sold this grade of yarn in quantities ranging from 25,000 to 50,000 lbs. at 55c. and in one instance secured 56c. Delivery specified was from October to the end of the year, others running until next February. Certain dealers have been successful in selling good orders to the carpet trade of 8s-3 on a basis of 42½ to 43c. for tinged and 44 to 45c. for white, a large order being placed at 44c. Others declare carpet yarn buyers have not come into the market generally as yet, and are waiting the result of recent openings of new lines.

Combed Yarns Quiet

Combed yarns have been quiet, with no important sales noted. Prices are from 1 to 5c. higher than last week, depending on the count. Average quality 60s-2 is now available at 95c., although a better grade yarn has sold at $1. A small lot of 36s-1 combed peeler cones was sold at 70c; this figure is several cents under the lowest figures from spinners. Two-ply combed yarns are lacking in interest. It is generally thought mercerizers have covered their requirements up to December in combed yarns at approximately an 80c. level for 60s-2, so that many combed yarn dealers do not look for any renewed buying of consequence from this source until November. Combed yarn factors believe a larger volume of buying will start after cotton prices have become more stable and give buyers an opportunity to catch up with quotations. Mercerized yarns are moving in limited amounts only. Buyers have not accepted the last increase in these yarns and are now purchasing only when necessary in small quantities.

A significant feature of recent business is the increased ease with which dealers and spinners are able to obtain premiums for forward deliveries, particularly for contracts extending well into next year. While business on 20s-2 carded warps has been accepted at 51 to 52c. for deliveries up to December and January and for later deliveries, most sellers want a basis of 52 to 53c.; for 30s-2 warps the spot price is 56 to 57c., while for January and later delivery 57 to 58c. is demanded. As indicating the tendency of the market it may be stated that some high grade 20s-2 warps for near delivery have been sold as high as 53½c., and high grade 30s-2 at 58c. For frame-spun hosiery yarns of average grade a basis of 43 to 43½c. covers most of the business placed for near delivery, while for January and later delivery, 44 to 44½c. is asked; 22s were sold for near delivery at 47 to 47½c., and for January-April delivery at 48 to 48½c. Eastern spinners report that it difficult to get better than a basis of 45c. for 10s carded peeler cones, but that 58c. is the minimum for 18s combed peeler cones, with many spinners holding at 60c. and above. The increasing scarcity and firmness of the longer staple domestic cottons of high grade is obliging spinners to advance their asking prices despite the comparatively small volume of business moving. Few eastern spinners quote a basis of less than $1 for 60s-2 combed peeler yarns, whether on cones, warps or tubes, while for higher grade yarns as high as $1.05 to $1.10 is asked. Asking prices on mercerized yarns range from $1.13 to $1.25 for 60s-2 combed peeler ungassed, and some southern mercerizers are asking as high as $1.15.

Demand Broadens

Upward Tendency of Medium and Coarse Count Cotton Yarns

Boston.—Both the knitters and weavers have been taking medium and coarse count carded cotton yarns with increased freedom, and in some instances for delivery as far ahead as March of next year. The bulk of the business, however, is for delivery during the balance of this year, and on weaving yarns coarser than 40s prices are up ½c. to 1c. Hosiery yarns are relatively weaker than weaving yarns, but price tendency is upward, although actual selling prices are about a cent below asking prices of many spinners. Eastern spinners are participating in the improved demand for carded and combed hosiery yarns, but business on combed and fine count carded weaving yarns and mercerized yarns remains slow and unsatisfactory. Recent advances in asking prices on the latter are well maintained, but this is due more to the extreme firmness of staple cottons than it is to the volume of demand.

N. Y. Cotton Yarn Market

(*Continued from page* 147)

more nearly the spinners' quotation than for a long time. As a consequence the list quoted shows practically no changes from last week. Where any variation has occurred it has been caused by the willingness of isolated spinners to name a price on which more liberal trading might be effected or in other instances it may be the result of dealers having a certain amount of stock yarn which they are willing to dispose of below replacement basis. As an illustration of this, the case of 12s-2 warps may be instanced. Business on stock yarn has been done at 46c. and yet the

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Cotton Yarn Markets—Ctd.

same dealer on a larger lot of yarn has been willing to dispose of a certain amount of his holdings at 44c. The latter, however, is not a price that is regarded as establishing a basis. Spot business has also been done on 16s-2 warps at 49c. which is near the spinners' figure.

More Activity Expected

It is anticipated that certain divisions of the industry are likely to show more activity in the near future. Considerable buying is looked for from the carpet trade. As the result of the auction sale this week and the naming of prices by leading concerns it is believed it will be necessary to make provision for future requirements. As a result a good many predict that the price of 50c. for 20s-2 warps is not likely to hold very long and that the spinners' asking price of 52c. and above may be speedily realized. On 30s-2 skins and warps there is not the normal difference between the next lower number and this count. As a matter of fact, prices on 26s and 30s are almost identical. The demand for the latter number has fallen off materially and the effect has been appreciable in the price. Doubtless 30s could be bought today for 54c., though the majority of spinners would hardly consider this figure and a number are asking 56c. and above.

The situation on tinged yarn is likely to show considerable change if all the reports regarding damage by rain to the crop prove to be correct. Comparatively little tinged yarn has been on the market of late as spinners have found it difficult to secure cotton of this character and with its scarcity prices have risen so closely to those of white yarn that there has not been the incentive to make it, while the buyer has bought pure white yarn in preference. Also much of the tinged yarn has been made from waste and is not correctly termed "tinged." If, however, the supply of this character of cotton is to show a material increase prices of yarn made therefrom are likely to be comparatively lower before the season is far advanced. On 8s-3 tinged, where available, price is about 40c. and white yarn approximately 44c. This is a slightly wider margin that has been in evidence of late and it is expected that the spread will become gradually wider.

Knitters Stop Buying

The demand for hosiery yarn has practically stopped for the time being, owing to the effects of cotton decline, but it is anticipated that interest may be revived at almost any time. The necessities of the knitter are thought to be considerable and purchases of late insufficient to cover requirements. While knitting yarns are based on about 44c. for 10s, there have been isolated instances, as before reported, where certain spinners, few in number, have been willing to take business at practically a cent below the figure. The former price, however, is generally regarded as representative of spinners' ideas, below which they are not willing to go, and any transactions

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Cotton Yarn Markets—Continued

under this have been in the nature of sales from stock bought some time ago. It is not thought, however, that any large supply of knitting yarns exists in the hands of dealers and quotations approximate very closely the asking price of the spinner.

Watching Yarn Market

Manufacturers Have Immediate Needs Covered

CHICAGO.—Manufacturers seem to have their immediate requirements in cotton yarns covered, and are watching the market closely, for opportunities to cover further into the future. Granted that raw cotton keeps its present levels, or advances in price, many buyers will be obliged to come into the market, at least for a limited amount of yarn.

But few operators have covered far into the future on the low market that prevailed four to six weeks ago, but there are some in that fortunate position. For the present, however, business is rather quiet.

Tens single, ordinary carded yarn on cones, hosiery twist, has been generally quoted at 45 to 46c; 20s at 49 to 50c; 30s at 54 to 56c, according to quality.

Mercerized yarns show activity only in spots. High grade yarns were offered on a basis of $1.15 to $1.25, with but a limited amount of business placed.

Cotton Yarn Trade Notes

The Dunn-Wetzell Co., Inc., cotton yarns, Philadelphia, has opened a New York office to take care of their business in that territory. This is located at 151 Fifth Avenue, and will be in charge of E. I. Reynolds, who was formerly in charge of the New York office of the Lowell Yarn Co. This firm is the direct representative of a number of well-known spinners of combed and carded weaving and knitting yarns, including also heathers and stock dyed yarns. They also represent Wm. A. Holt, Ltd., Bolton, England, in this country, fine combed Egyptian and Sea Island.

The attempt of a burglar to loot the country house of Leonard Linkroum of Paulson, Linkroum & Co., frustrated through the coolheadedness of his 11-year-old son, entitles the latter, according to the trade, to an eventual place in the ranks of yarn sellers where such qualities are almost constantly necessary.

The Aberfoyle Mfg. Co., Chester, Pa., yarn spinners, and mercerizers, has opened an office in the Volunteer Building, Chattanooga, Tenn., in charge of R. Bruce Wallace, Jr.

BROOKLYN, N. Y. An involuntary petition in bankruptcy has been filed against the Liberty Braid Mfg. Co. The assets are stated as $3,000, and liabilities, $16,000. Michael Stein has been appointed receiver.

Cotton Wastes Strong

Peeler, Sak. and Arizona Strips Sell Readily

BOSTON.—The cotton waste market shows a distinct improvement. Responsible houses on the street say that a most unexpected change has occurred in demand from consuming mills and that so far as they are able to forecast the situation an acute shortage of desirable wastes is in sight. Over a considerable period cotton manufacturing has suffered a marked degree of curtailment but, during the last week or two, mill interests, recognizing the improbability of a low cotton market are adapting themselves to the situation.

The feature of the market, so far as particular stocks are concerned, is the surprising strength in Sak. and Arizona strips, good grades of the latter being quoted as high as 26c. Peeler strips are also scarce and high priced. Stocks of comber are quite low, and, according to one member of the exchange, it is evident that there is not enough material to go around. Flat price materials are sharing in the strength of the market. It is a difficult and unsatisfactory proposition to quote non-percentage materials as they vary considerably; but on the present market soiled cards range from 12 to 15c.; oily cards, 8-10c.; white sweeps, 3-3½c.; colored sweeps, 2-2½c. Although the prices of picker and fly are supposed to be governed more by the situation in linters than the price of spot cotton, both these commodities seem to be following closely the upward movement led by spinnable materials.

Sak. strips have disappeared almost entirely. They were not in any abundance and as they are long-fibred and the color is no objection if they can be used in yarns likely to be dyed they have passed out of the market on a high-price level of 80% or better of spot cotton. Many mills, it is said, are utilizing to the fullest extent their own spinnable wastes.

Cotton Waste Quotations

Peeler comber	24 -25
Peeler strips	23½-24
Sak. comber	23 -24
Sak. strips	24 -25
Fine white Cop	13 -13½
Choice willowed fly	10 -11½
Choice willowed picker	8½- 9½
Spooler and slasher	11½-12
Linters (mill run)	6½- 7½

WINSTON-SALEM, N. C. The New Jersey corporation formerly known as the Washington Mills, has been dissolved and the company has been rechartered under the laws of North Carolina with an authorized capital stock of $5,000,000, according to an official announcement from the executive offices of the company in this city. The Washington Mills was organized in 1901 and chartered under the laws of N. J. Officers of the reorganized company are: F. H. Fries, president; A. H. Bahnson, vice president and treasurer; C. H. Reed, secretary; E. F. Tulloch, assistant secretary and assistant treasurer, all of Winston-Salem; T. H. Turner, assistant treasurer, Mayodan; John Thorpe, assistant treasurer, Fries, Va.

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NOVELTY YARNS Poucle, Bourette and Spirals in Cotton, Wool, Worsted, Mohair and Silk
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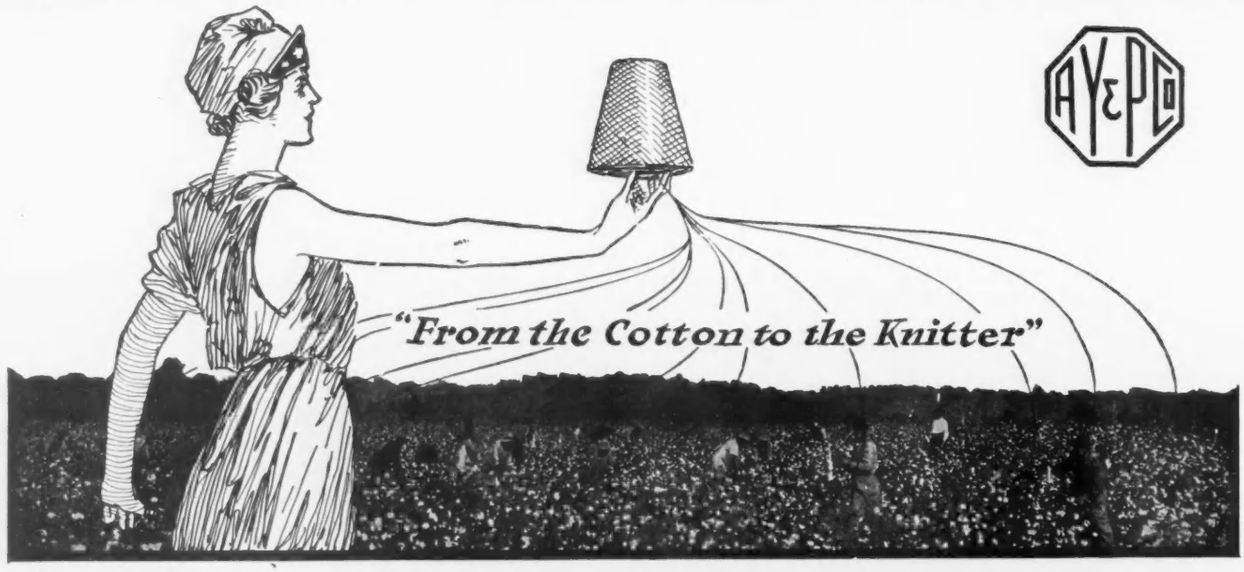

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Let us rewind some of your yarn as a test of Lazenby Results.

COTTON MARKETS

Cotton Holds Steady After Sharp Break

Lighter Ginning Figures Than Expected Followed by More Favorable Yield Indication

It is extremely doubtful whether the Government's end-September crop report would have caused any severe break in the cotton market had it not been preceded by the publication of unexpectedly light ginning returns. The latter evidently created a more or less general expectation that the crop report would prove another "bullish surprise." As a result the market advanced sharply during the hour which intervened between the ginning and the crop figures, and when the publication of the latter brought about a revulsion of sentiment, they broke even more rapidly. December contracts which had advanced to 29.35c. on the ginning report sold off to 27.56c. before the selling movement was completed, but the excitement then subsided and prices later in the week recovered a good part of the loss and on Thursday were ruling at about the same levels as those which had prevailed toward the end of last month.

As a matter of fact there would seem no good reason for regarding either the ginning to Sept. 25 or the end-September condition report as warrant for any important change in ideas of the supply situation. Possibly the trade was looking for a crop indication of nearly 10,750,000 than 11,000,000 bales, but a difference of 250,000 bales in the crop prospect is of comparatively small importance in the long run, and it is entirely probable that the question of maximum prices for cotton this season will be determined in the goods markets rather than in such changes as may occur in crop ideas during the balance of the season. Last Tuesday's report was the last of the regular monthly reports of the season. The condition reported of 49.5 pointed to a yield of 11,015,000 bales with average weather conditions hereafter. The ultimate result, even if this is an absolutely correct appraisement of the prospect as it stood on Sept. 25, may be considerably modified by departures from average conditions in the South, either way. Since the report was issued, there have been further rains in both Oklahoma and Texas, leading to complaints of further deterioration in grade. Last season there were consumed in this country, exclusive of linters and foreign cotton, 6,322,000 bales which taken from a crop of 11,000,000 bales would leave about 4,700,000 bales available for export compared with last season's actual exports of 4,823,000 bales excluding linter.

The ginning of 3,215,394 bales to Sept. 25 was well below expectations which had been based very largely upon the fact that ginnings up to Sept. 1 had exceeded all previous records. The comparatively small ginning for the period Sept. 1 to Sept. 25, however, was obviously due to the lateness of the crop outside of Texas and to delays occasioned by unfavorable weather in the Southwest.

The following table shows Thursday's closing quotations in the leading spot markets of the country, with the usual comparisons:

Market.	Sept. 27.	Oct. 4.	Chge.	Last Year.	Sales.
Galveston	28.60	28.50	— .10	20.80	15,507
N. Orleans.	28.25	28.50	+ .25	20.50	4,928
Mobile	28.00	28.00	..	20.25	244
Savannah	28.36	28.25	— .11	21.00	1,789
Norfolk	28.25	28.13	— .12	21.00	6,179
New York.	29.45	29.20	— .25	21.25	....
Augusta	28.25	28.19	— .06	20.94	2,938
Memphis	28.75	28.50	— .25	20.75	6,575
St. Louis.	28.75	28.75	..	20.75	....
Houston	28.50	28.30	— .20	20.75	62,269
Dallas	27.70	27.70	..	20.20	53,496

The following differences on and off middlings are given as compiled from the reports received by the New York Cotton Exchange. The cotton grades marked ** are not delivered on contract.

White Grades

	Dallas	Memphis.	Montgomery.	Augusta.	Average.
M. F.	1.00†	1.00†	1.13†	1.25†	1.13†
†S. G. M.	.75†	.75†	.88†	1.00†	.88†
G. M.	.62†	.50†	.63†	.75†	.65†
S. M.	.37†	.25†	.38†	.50†	.38†
S. L. M.	.75*	.50*	.75*	.75*	.70*
L. M.	1.25*	1.00*	1.50*	1.50*	1.35*
**S. G. O.	2.00*	1.50*	2.25*	2.25*	2.13*
**G. O.	3.00*	2.00*	3.00*	3.00*	2.93*

Yellow Tinged

G. M.	.10*	.15*	.25*	.38*	.28*
S. M.	.15*	.40*	.63*	.75*	.63*
**M.	1.25*	.90*	1.25*	1.25*	1.25*
**S. L. M.	1.75*	1.50*	2.00*	1.75*	1.89*
**L. M.	2.50*	2.00*	2.75*	2.25*	2.62*

Yellow Stained

G. M.	.90*	.90*	1.00*	1.13*	1.12*
**S. M.	1.50*	1.50*	1.50*	1.63*	1.63*
**M.	2.00*	2.00*	2.00*	2.13*	2.15*

Blue Stained

**G. M.	1.00*	1.00*	1.00*	1.25*	1.09*
**S. M.	1.75*	1.25*	1.50*	1.75*	1.55*
**M.	2.50*	1.50*	2.00*	2.25*	2.10*

* Off middling. † On middling.

COTTON STATISTICAL DATA

Fluctuations of Futures

Option.	Closed, Sept. 26.	For week—High.	Low.	Closed, Oct. 3.	Chge.
Oct.	28.50	29.55	27.83	28.60	+.10
Nov.	28.37	29.20	28.32	28.43	+.06
Dec.	28.25	29.35	27.56	28.35	+.10
Jan.	27.80	28.87	27.00	27.90	+.10
Feb.	27.75	28.13	27.45	27.89	+.14
March	27.70	28.83	27.05	27.88	+.18
April	27.70	28.10	27.46	27.91	+.21
May	27.71	28.85	27.05	27.94	+.23
June	27.35	27.85	27.18	27.53	+.18
July	27.05	28.18	26.54	27.33	+.28

Spot Fluctuations for Week

(MIDDLING)

	New York.	New Orleans.	Liverpool.
Friday, Sept. 28	29.55c.	28.50c.	16.91d.
Saturday, Sept. 29	29.40c.	28.50c.	17.13d.
Monday, Oct. 1	29.50c.	28.50c.	16.97d.
Tuesday, Oct. 2	29.00c.	28.25c.	17.07d.
Wednesday, Oct. 3	29.10c.	28.50c.	16.43d.
Thursday, Oct. 4	29.20c.	28.50c.	16.79d.

Spot Fluctuations and Stocks

	Spot Prices.	This Week.	Last Year.
Galveston	28.50c.	209,956	325,528
New Orleans	28.50c.	86,105	126,838
Mobile	28.00c.	4,298	12,276
Savannah	28.17c.	47,964	75,231
Charleston	....	33,841	38,382
Wilmington	....	14,777	12,966
Norfolk	28.06c.	29,477	45,239
Baltimore	28.25c.	967	1,561
Augusta	28.06c.	29,457	62,617
Memphis	28.50c.	55,356	84,049
St. Louis	28.50c.	2,915	9,008
Houston	28.30c.	300,072	285,546
Little Rock	28.50c.	14,284	43,082

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Present indications point to a lively demand for Ratine for late fall and spring of 1924.

As pioneers in the production of these yarns, we offer not only a wide assortment of Ratine, but also of Nub Yarns—an entirely new creation for this season.

Both Ratine and Nub Yarns can be had in all white, black and white, and two or more colors.

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CHATTANOOGA, TENN.

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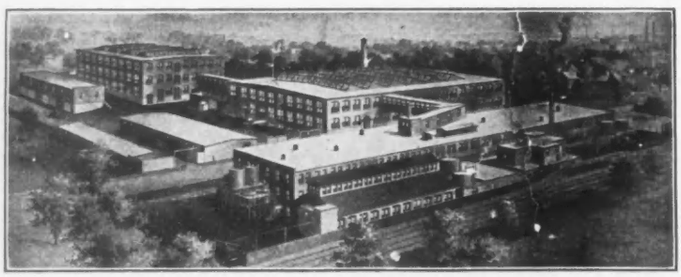
REPRESENTATIVES: Philadelphia, Pa., Cameron & Pfingst—Reading, Pa., Cameron & Pfingst—Canada, Slater & Co., Toronto.



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Cotton Markets—Continued

Cotton Stocks Growing

New Arrivals Indicate Better Staple Than Last Year

MEMPHIS, Tenn.—While there is an air of activity about the cotton market here, sales during the week were much lighter than during the previous week. Stocks, both the unsold supply in hands of factors and the total in warehouse here showed increases for the first time in months. While, because of rains, there is little bloomy cotton coming in, the staple is better than last year, some sections showing a full sixteenth better for given varieties.

The lull in putting through transactions, it is believed, will be brief and is due to uncertainty relative to the Government report. Local opinions have been about as widely apart as have been private estimates ahead of the report, ranging all the way from less than 10,000,000 bales indicated yield, to more than 11,000,000, with opinion centering around 10,500,000 bales for the crop. Weather conditions throughout the belt have been much more favorable during the week, particularly over central sections, enabling farmers to make good progress with picking. The date of killing frost does not make much difference except in west Texas, and parts of Oklahoma and Arkansas, southeastern Missouri and parts of North Carolina, where insect damage has been negligible and the plant is still blooming. It is expected, however, that all blooms after the middle of September will be caught by frost either as a bloom or small boll.

Prices Show Variation

Gin run cotton, usually inch to 1 1/16 inch is selling in the territory at 26 to 28½c. Full inch cotton on the local market is selling at about official quotations, with middling 1 1/16, bringing from 100 to 150 on. Strict middling full 1⅛ is selling in a small way at 33c., while the price required to buy 1 3/16 is 34 to 35c. However, some sales, at interior points, are being reported at prices as low as 30¼c. for strict middling staples. While price ideas are still slow in forming, those who expect staples to do better than they did last year, are encouraged by the start that has been made. The highest price mentioned in sales reports during the week was from Clarksdale, Miss., where strict middling 1¼ brought 37c. Greenwood reported 1¼ inch strict middling sold at 36c., while Canton sold strict to good middling 1¼ to 1 5/16 at 36c.

Extra Staples Firmer

Poor Condition of Delta Crop Confirmed—Egyptians Up

BOSTON, Oct. 3.—Tuesday's government condition report was accepted quite generally as bullish on the extra staple delta cottons of middling and better grade, and somewhat bearish on the shorter staple of 1 1/16 to 1 3/16 inch cottons. There are few spinners who are willing to accept the Mississippi and Arkansas condition and yield figures of Oct. 2 as final or conclusive, yet they are showing a disposition to operate a little more freely whenever delta cottons of middling and better grade are offered at or below last week's average figures. On the shorter staples as well as on short cottons generally the majority of spinners are marking time, in the belief that they will be able to operate at lower prices as the movement of the crop nears the peak. Nearly everything up to 1 1/8 inch cotton and in grades up to strict middling is being offered with increased freedom, although at about the same net prices as ruled last week, most shippers having raised their basis on the longest of these cottons and on grades better than middling.

An increased demand for Sakalarides Egyptian for near and forward shipment is reported, and a more moderate demand for Uppers. Prices of the latter are unchanged, but Sak. for prompt shipment is up a half cent while the net advance for the week in Sak. futures is about 70 points and for Uppers about 40 points. With Sak. remaining fully 5c. a pound cheaper than comparative varieties of domestic staples it is not strange that an increasing number of spinners should be substituting the former.

Prices of Deltas and Egyptians

Average prices for middling and strict middling hard western cotton (full lengths) for Oct.-Nov. shipment are as follows:

Staple.	Middling.	St. Middling.
1 1/16 in.	29½ to 30½c.	31 to 32c.
1 1/16 to 1⅛ in.	31 to 32c.	33 to 34c.
1⅛ in.	33 to 34c.	35½ to 36½c.
1 3/16 in.	34 to 35c.	37 to 38c.
1¼ in.	37½ to 38½c.	41 to 42½c.

John Malloch & Co., Boston, quote Egyptian cotton for forward shipment c. i. f. Boston, as follows: Medium Sakalarides (prompt shipment), 36⅜c., up ⅛c. from Sept. 26; medium Uppers (Oct.-Dec. shipment), 32⅞., unchanged. They report closing prices Oct. 3 on the Alexandria exchange as follows: Nov. (Sak.) $35.45 up 70 points from Sept. 26; Oct. (Uppers), $30.85, up 40 points.

Market Statistics

Basis Middling

	Saturday, Sept. 29	Saturday, Sept. 22
10 markets average	28.23c.	28.80c.
Memphis	28.75c.	29.00c.

Premium Staples

First Sales Factors' Table Memphis

Grade	Strict Middling
	Nominal
1 1/16-in.	30⅛-31⅛c.
1⅛-in.	32-33c.
1 3/16-in.	34-35c.
1¼-in.	36-37c.

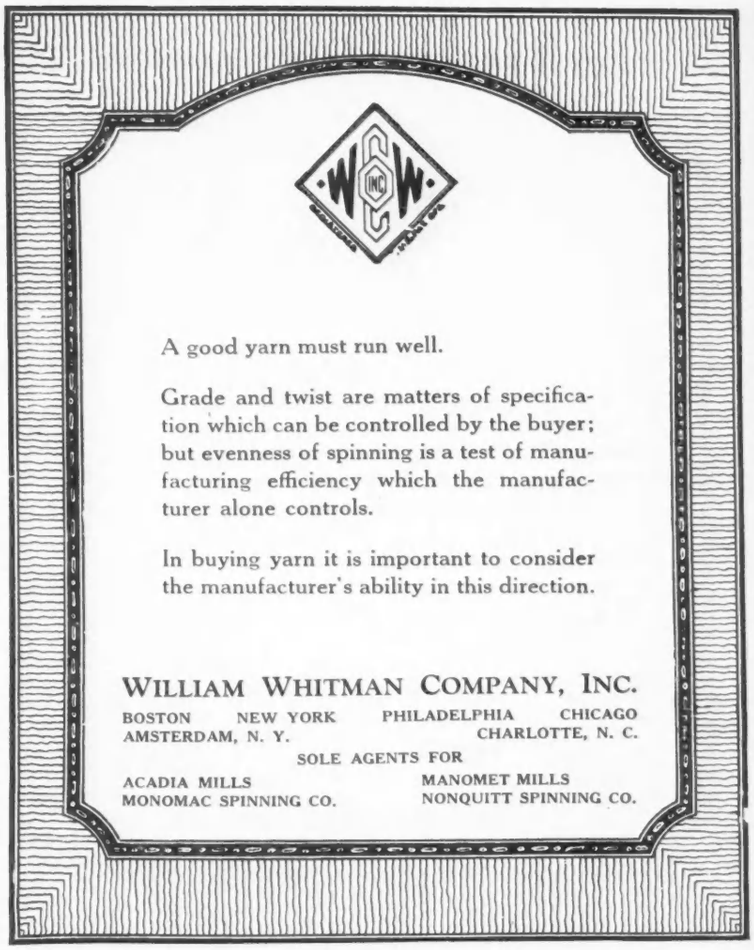
Current Sales

	For Week	Week Previous	Week Before
Memphis, total	4,525	14,825	6,000
Including f. o. b.	3,425	12,150	5,250
10 markets, total	185,938	198,358	184,169

Memphis Receipts, Shipments, Etc.

	For Week	Last Year	Year Before
Gross receipts	13,998	25,375	17,898
Shipments	12,049	11,613	17,749
Net receipts	3,411	17,562	9,681
Total since Aug. 1, net	5,601	31,499	21,254
Total Stock	49,337	72,283	208,587
Increase for week	1,949	13,762	149
Unsold stock	16,500	41,000	92,000
Increase for week	2,000	10,000	15,000*

* Decrease



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Grade and twist are matters of specification which can be controlled by the buyer; but evenness of spinning is a test of manufacturing efficiency which the manufacturer alone controls.

In buying yarn it is important to consider the manufacturer's ability in this direction.

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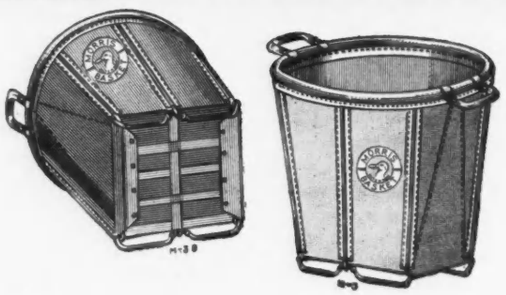

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Cotton Markets—Continued

World Cotton Stocks

Estimated at 5,359,000 Bales July 31—Last Year, 7,076,000

World stocks of cotton (visible and in spinners' hands) on July 31, are estimated at 5,359,000 bales by the International Federation of Cotton Spinners according to a cablegram received by the U. S. Dept. of Agriculture from its Agricultural Commissioner at London. World stocks on the same date last year were estimated by the same authority at 7,076,000 bales, and on July 31, 1921, at 8,856,000 bales.

World stocks on July 31, 1923, were estimated by the U. S. Depts. of Commerce and Agriculture at 6,400,000 bales as compared with 9,536,000 bales on the same date in 1922.

According to the estimate by the International Federation of Cotton Spinners, world stocks in spinners' hands on July 31 were 3,872,000 bales, as compared with 4,287,000 bales in 1922 and with 3,927,000 bales in 1921. Included in these figures are American stocks in spinners' hands estimated at 1,689,000 bales July 31 as compared with 2,208,000 bales in 1922, and with 2,003,000 bales in 1921. Stocks of American cotton were estimated by the same authority at 2,527,000 bales July 31 as compared with 4,196,000 bales in 1922 and with 6,097,000 bales in 1921.

An increase in world consumption of cotton of more than 2,000,000 bales over consumption last year is also estimated by the International Federation. Consumption for the year ended July 31 is estimated at 20,885,000 bales as compared with 18,809,000 bales for the same period last year. Consumption of American cotton is estimated at 12,286,000 bales as compared with 11,750,000 bales in 1922.

The number of spindles in all countries is estimated by the International Federation at 156,576,497 as compared with 154,555,267 in 1922, and with 152,317,054 in 1921.

Chinese Industrial Comm.

Will Investigate Textile Conditions in Other Countries

An industrial commission, appointed by the Chinese Government to investigate conditions in Europe, United States and Japan, sailed from Shanghai September 14 for Marseilles, France, and after spending some three months in Europe will arrive in this country some time in January. Textile manufacturing in the various countries to be visited will be one of the principal subjects of investigation, the chairman of the commission and several of its members being prominently identified with cotton manufacture in China.

The head of the commission, who has the official title of "High Commissioner of the Republic of China to Investigate Industrial Conditions in Europe, America and Japan," is Chang Chien, Jr., the youthful son of the Honorable Chang Chien of Nantungchow who was a pioneer in cotton cultivation and manufacturing in China; Mr. Chang, Jr., and several other members of the commission finished their education in this country, and he is actively identified with the textile industry in China. The secretaries of the commission are Dr. Chungtao T. Chu, a graduate of one of our universities, and Techung Hsi, a graduate of the Massachusetts Institute of Technology. The commission's textile expert is Wenchuan Chang, a graduate of the Lowell Textile School and engineer of Dah Sung No. 1 Mill. The other attaches are Alex. Y. Lee, Chao Feng Hsu, and D. C. Hsu. The commission will spend at least two months in this country and will devote the greater part of its time to an investigation of cotton, wool and silk manufactures.

For World Wool Grades

(*Continued from page* 80)

conference of American Government and wool industry representatives then called to pass upon the sets. The next move will be to distribute sets among the American and English trade. Capt. L. E. J. Brady of the Dept. of Industries and Manufactures has promised to arrange distribution of the sets among the British wool interests.

Uniform Standard

"This is the first step in a series of negotiations that it is hoped will result in the establishment of a uniform standard applicable everywhere throughout the world," Mr. Willingmyre said. "Although at the present time the standards used by many of the Bradford mills do not agree, leading wool men in England are convinced of the need of universal standards and a sincere effort will be made first to induce the trade to deal on the basis of a single set of grades that represents their composite ideas. It will then be comparatively simple to correlate the American grades with the English grades, so that when an American buyer orders wool from an English house he can know precisely the kind of wool that will be delivered."

Mr. Willingmyre pointed out to the Bradford committee that the set of grades prepared are to be used merely as a basis for further research work. The committee was agreed as to the need for such work, and endorsed the general idea of universal standards. In view of the co-operation of the Bradford mill interests Mr. Willingmyre feels that a good start has been made toward developing universal standards for wool.

PATERSON, N. J.—The Arcola Piece Dyeing Co. has purchased the Solomon Mill at Bleeker and Shady streets, Paterson, for a price reported to be $30,000. The plant contains approximately 15,000 square feet of floor space and the purchasing company plans to use it to extend the field of its activities.

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STANDARD
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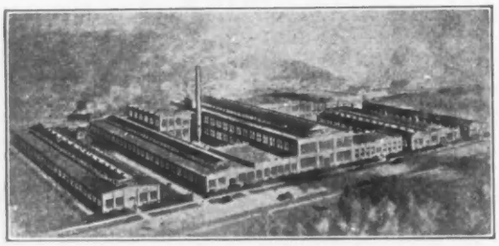

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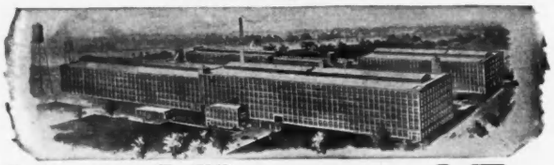

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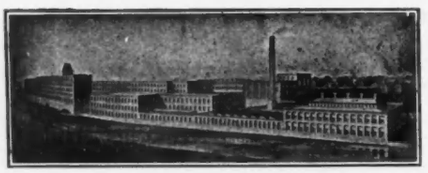

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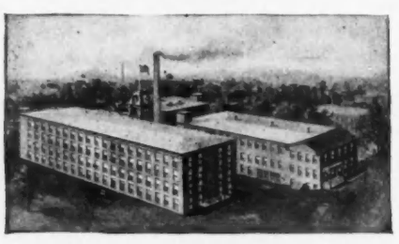

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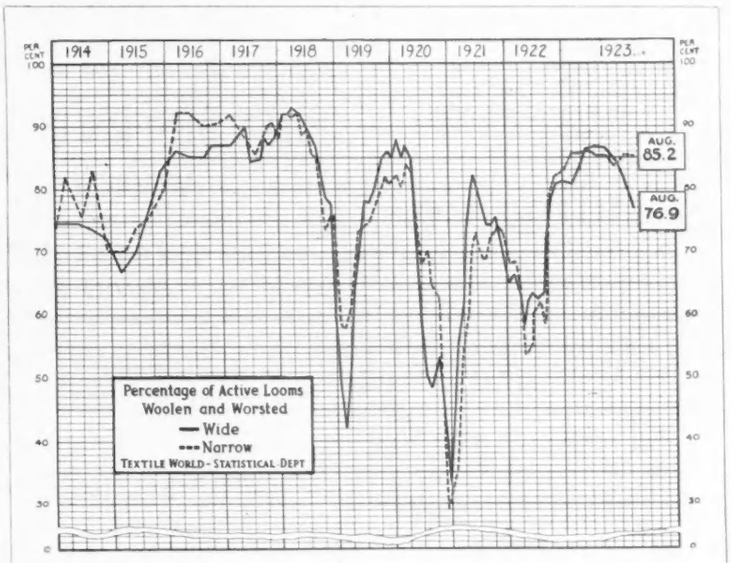
WORSTED YARN MARKETS

Knitting Yarns Still Hold Chief Place

Scattered Dress Goods Buying—Men's Wear Slow—Spinners Turn to Knitting Yarns

Interest in worsted yarns continues to be centered in knitting grades. Limited activity has been noted in weaving yarns, dress goods manufacturers being in the market from time to time for small quantities. French spun yarns are quiet, with lower quotations being made by spinners to attract orders. Several weaving yarn spinners have turned their production over to knitting yarns and are taking advantage of the undiminished demand for these. Many of these are working day and night shifts in order to supply large amounts of these yarns, which are wanted for the quickest possible delivery. Certain plants have booked enough business to keep them busy during the balance of the year. Spinners who were burdened with large quantities of low wools on which they expected to take a loss, are now in the best position to supply lower priced knitting yarns. When these stocks are exhausted many factors look for an increase in the price or knitters will receive lower grade yarns if they continue to demand lower quotations.

One of the largest spinners of weaving yarns has turned his entire production over to the manufacture of one count of knitting yarns and has been successful in selling his output for the next six weeks. This particular spinner is in a fortunate position, having a stock of low wools on hand and thus able to underbid competitors on similar grades, who must go into the market for additional wools. Low quarter-blood wools are firmer and are being quoted higher by many dealers. Rather than pay higher figures many spinners are purchasing lower and cheaper wools than they have used heretofore in spinning yarns of this character. Many spinners ask, "Why should we continue to spin 2-50s and sell them at actual cost or even a loss to dress goods manufacturers, when we can turn our machinery over to knitting yarns and sell all we can spin at a profit at the present time?" They realize that demand from knitters will not continue indefinitely, but from such a situation they have all to gain and nothing to lose, keeping their machines running; they have used their stock of low wools and have turned them into cash, selling customers they never had on their books before. When this demand recedes these spinners will undoubtedly return to their former counts. However, the point is now being made, should any large demand for weaving yarns appear during the next two months, many spinners would not be in position to figure on these inquiries, as practically all of their spindles would be running on knitting yarns.



(Chart Showing Active Spindles on Page 165)

Improved Dress Goods

A decided improvement has taken place among dress goods mills during September. Although not generally busy as yet, many are now working full time. Others, not so fortunate, declare they will be able to start operations in the near future, as orders for their goods are being received in better volume. Buyers are refusing to pay spinners prices for weaving yarns and continue to place orders at figures considerably below the market quotation in many instances. This trade is specifying 2-50s, with a smaller demand for 2-60s reported; single warp and filling yarns are also showing improvement. Wool spun yarns of special texture are being purchased in several cases by dress goods weavers. Several sales of 2-50s fine have been noted at $2.50, although the majority of spinners ask $2.55 to $2.60 for this quality, claiming at the former price they would not make anything on the transaction. Notwithstanding sales at cheap prices many are firmer in their quotations, and confidently believe quotations are about to go much higher, as spinners are practically out of their lower priced wools and will refuse to sell below replacement costs when it becomes necessary for them to purchase additional wools at higher figures.

Knitters' Activity

Astrakan yarns are in good demand for fancy knitware, 2s and 6s and 2s and 7s, the latter in many instances being for black and white quality, are the popular numbers. Prices average $1.05 for 2s and 6s and $1.15 to $1.17½ for 2s and 7s in black and white. For brushed knitted wear, 2-18s, 2-02s and 2-24s are the numbers specified, with delivery to be made as soon as possible, other orders running until late November or December. Prices vary over a considerable range, the average quotation being $1.10 for 2-20s low common and $1.40 to $1.45 for average to high quarter. Because of the large volume of these yarns changing hands prices are firmer in many cases, and several spinners have been able to secure advances over their former quotations. Jersey cloth yarns are showing improved demand for use in dress fabrics and coatings, heather mixes also being called for by this trade. Carpet yarns are more active and selling in larger quantities, due to the interest being shown by manufacturers who are coming into the market to cover their yarn requirements on new lines, several of which were opened during the last week.

Quotations

(Corrected at Close of Business Wednesday)

Bradford System

2-12s to 2-16s, low com.	1 05	—1 10
2-20s to 2-24s, low ¼	1 15	—1 30
2-20s to 2-26s, ¼ blood.	1 40	—1 55
2-26s to 2-30s, ¼ blood.	1 50	—1 60
2-30s to 2-32s, ¼ blood, S. A.	1 55	—1 60
2-32s, ¼ blood	1 60	—1 65
2-20s, ⅜ blood	1 65	—1 75
2-26s, ⅜ blood	1 70	—1 80
2-32s, ⅜ blood	1 75	—1 85
2-36s, ⅜ blood	1 80	—1 90
2-32s, ½ blood	2 12	—2 22
2-36s, ½ blood	2 15	—2 25
2-40s, ½ blood	2 20	—2 30
2-50s high ½ blood	2 45	—2 50
2-50s fine	2 55	—2 60
2-60s fine	3 15	—3 30
2-70s Australian	3 45	—3 55

French System

20s quarter	1 50	—1 60
20s high quarter	1 70	—1 80
20s ⅜ blood	1 85	—1 90
30s ⅜ blood	1 95	—2 00
30s ½ blood	2 20	—2 25
40s ½ blood	2 35	—2 45
50s	2 65	—2 70

Knitting Yarns in Oil (Bradford)

2-5s to 2-10s, ¼ blood.	1 35	—1 40
2-11s to 2-20s, ¼ blood.	1 40	—1 45
2-20s to 2-30s, ¼ blood.	1 45	—1 60
2-16s to 2-20s, ⅜ blood.	1 60	—1 70
2-20s to 2-30s, ⅜ blood.	1 80	—1 90
2-20s to 2-30s, ½ blood.	2 15	—2 20

French Spun Merino, White

30s 50-50	1 60	—1 70
30s 60-40	1 67½	—1 77½
30s 70-30	1 77½	—1 87½
30s 80-20	1 82½	—1 92½

Yarn Market Irregular

Worsted Weaving Yarns Stagnant—Most Knitting Yarns Active

BOSTON.—The market in worsted yarns is featured by intense dulness in weaving yarns and considerable activity in medium to low knitting yarns which are going into various fabrics intended for women's wear. This line of business is considered particularly seasonable and to a fairly large degree going into specialties the demand for which may disappear as rapidly as it appeared. According to one agent, men's wear business is better and spinners are doing a little more, anticipating better conditions before the end of the year; while another important factor stated that the men's wear business was absolutely dead. It is quite unsatisfactory; about that there can be no doubt.

The amount of new business appearing is, in the aggregate, insufficient to keep the spindles of the industry from declining in output. In July 90.5% of the worsted spindles of the country were active; for August the figure was 84.5. Based upon single-shift, full-capacity the percentage of active hours in the industry was 89.7% in July and only 81.5% in August. A further decline in activity is probable for September.

The market is still somewhat unsettled, wanting apparently in the confidence usually displayed when the situation is shaping up rightly. There is a little apprehension regarding the "order today and cancel tomorrow" kind of business. Nothing has yet appeared to justify such an attitude, the nearest approach to it being the holding back of specifications to complete contracts. Prices are more nominal than real, except in the knitting yarns. Spinners still take the ground that half-blood tops at $1.50 and fine tops at $1.70 are about the lowest prices at which they will be willing to offer new business to the top makers. The wool market is too firm at the present time to allow top

Spun Silk

—prompt service, Careful attention

—for decorating worsteds and woolens.

—resist colors and extra fast shades for special requirements.

American Silk Spinning Co.

Providence, R. I. One Madison Ave., New York

WORSTED AND MERINO

FRENCH SPUN YARNS

FOR KNITTING AND WEAVING

Manufactured by

JULES DESURMONT WORSTED CO.

WOONSOCKET, R.I.

PHILADELPHIA PROVIDENCE BOSTON

THOMAS H. BALL
SELLING AGENT

NEW YORK MILWAUKEE CLEVELAND

87 YEARS OF MANUFACTURING

means that

THE EATON RAPIDS WOOLEN MILLS EATON RAPIDS, MICHIGAN

Have attained the highest degree of perfection in the production of Woolen Yarns for the knitting and weaving trade.

FOUNDED 1836

OSCAR HEINEMAN CORPORATION

RAW & THROWN SILK

CHICAGO

THE "MURDOCK"

Keep Your Spindles fully equipped with the

Murdock Bobbin Holders

in the perfection of your goods

Murdock & Geb Co., FRANKLIN MASS.

Ludwig Littauer & Co., Inc.

THROWN SILK, Tram, Organzine, Artificial Silk

Domestic and Imported, Plain, Gassed and Mercerised, Polished and Turkey Red Cotton.

Tinsel Thread

Best Quality Harness Twine

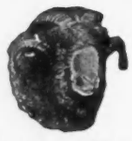
YARNS

30-38 East 33d St., New York

Silk Throwing Mills, CARTHAGE, BEACON and YONKERS, N. Y.

Woolen and Merino Yarns

WEAVING



KNITTING

Manufacturers Since 1864

JONATHAN RING & SON, Inc.

PHILADELPHIA, PA.

O. J. CARON

166 W. JACKSON BLVD.

CHICAGO, ILL.

KNITTING YARNS

Worsted and Worsted Merino

Gray Bleached Colors Heathers

WILLIAM RYLE & CO.

381 Fourth Ave. New York

Cor. 27th Street

Thrown Silk Yarns

For Silk, Woolen, Worsted Cotton and Knitting Mills

ART SILK TOPS and NOILS

Recognized as the standard by spinners of Quality

S. FEATHER CO.

110-16 Erie St., Camden, N. J.

Rockwell Woolen Co.

Leominster, Mass.

Manufacturers of

WOOLEN and MERINO YARNS

FOR WEAVING and KNITTING

Heather a Specialty Mixtures and Decorative Yarns

Mohair and Worsted

LOOP and NOVELTY YARNS

Massachusetts Mohair Plush Co.

200 DEVONSHIRE ST., BOSTON, MASS.

Mills at Lowell, Mass.

WM. H. RICHARDSON QUALITY WORSTED YARNS SINCE

Star Worsted Company

YARNS

FITCHBURG MASS.

Worsted Yarn Markets—Continued

makers to meet the demands of spinners, and as for low and medium wools and tops they are distinctly firmer.

Tops Are Irregular

Spinning Demand for Lower Quotations Barely Met by Makers

BOSTON.—The top market is encountering better business but there is still evident a desire for lower prices on the part of spinners and others. Standard top makers cannot altogether compete price for price with irregular manufacturers and state that it would be impossible to buy wool on the market today and sell half-blood tops below $1.50 or fine tops below $1.70. New business has been placed this week in half-blood, high and low three-eighths tops, the half-bloods selling at $1.52-55. Good business has come in on quarter-bloods ranging all the way down to 36s which are in particularly good demand.

The top market is distinctly better but combers are handicapped in their desire to lower quotations for tops by the low prices at which noils are selling. The better class of noils are too low in relation to the wools from which they are combed. While the men's wear business is slightly better the main support of the top market at the present time is coming from knitters. New Zealand 36s have been advanced 2c. per pound this week. Present strong demand for this type of top is from astrachan manufacturers. Argentina 36s do not quite meet the bill and are quoted 67-68c.

Trading in medium noils has broadened and while the larger number of the operations are between traders, mill demand is becoming more evident. As previously pointed out the combing mills are running to a considerable degree on medium to low wools which will necessarily mean larger output of the lower grades of noils. On the other hand the production of fine noils is relatively small and this accounts for the stiffening in price visible during the last week or ten days. Choice colored noils are offered in small quantities. The recombed noils bring high prices and are always salable. Mohair noils are a little more active; cashmere, camel hair and artificial silk remain quiet.

Current Quotations

	Tops	Noils
Fine territory	$1.70-$1.72	69-75c
Half-blood	1.55- 1.57	68-70c
High three-eighth blood	1.35- 1.40	60-61c
Aver. three-eighth blood	1.32- 1.35	58-59c
Low three-eighth blood	1.10- 1.12	52-53c
High quarter-blood	.98- 1.00	48-50c
46s	.92- .93	43-45c
44s	.80- .82	40-42c
40s	.72- .73	38-40c
36s N. Z.	.72- .73	36-38c

Spun Silk Firm

Leading Spinners Well Booked Ahead—No Change in Prices

Leading spinners are now well booked up for several months to come. Demand which had slacked off slightly asserted itself last week as the result of the more confident feeling all around. Few contracts are being placed for deliveries after the first of the year but up until that time manufacturers are fairly well covered.

Competition with the foreign producers which was felt about six weeks ago has been removed by a general advance in prices abroad and the recent rise in exchange. Prices are as follows:

60-2	$6.80	30-2	$5.60
50-2	6.25	20-2	5.25
40-2	6.10	60-1	5.75

Art Silk Active

Sales Continue Far in Excess of Last Year

Artificial silk producers have nothing to complain of in the recent developments which have had a far reaching effect on the demand for their product.

Sales have continued far in excess of last year with the leading producers finding all the business they can handle. Orders on their books already will carry them through the fall while in the judgment of many, 1924 will be the biggest year of all. Prices are as follows:

300 Deniers

Grade A	—Bleached	$2.65
" B	"	2.35
" C	"	2.05

150 Deniers

Grade A	—Bleached	2.80
" B	"	2.40
" C	"	2.05

Bradford Market

(*Continued from page 127*)

cellations of orders for piece goods have been withdrawn. Moreover, there are inquiries from that country which foreshadow new business in tops, yarns and piece goods.

Consular returns show exports from Bradford to United States for September of £455,050 as compared with £545,429 a year ago; wool bulked largely in shipments total being £85,339, while mohair yarns account for £78,370 and fully manufactured goods £81,000.

Executive committee of trades unions in wool textile trade have considered Chamber of Commerce resolution asking for Board of Trade inquiry into cause of unemployment with view to application of import duties on wool textiles. They unanimously passed resolution to effect that they did not regard tariff as a panacea for unemployment but asked Government to appoint committee of inquiry on which there should be represented employers, employed and consumers.

London sales closed with values generally on a par with opening rates except for low crossbreds which were from par to 5% dearer. Out of 192,000 bales sold, 96,000 bales were bought by home trade, 95,000 by Continent and 1,000 for America. Next sales will be held Oct. 23.

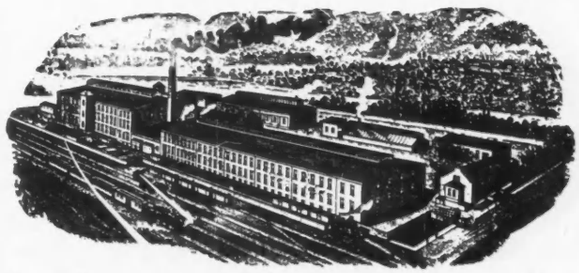
MILWAUKEE, WIS. The Federal Knitting Mills has applied for articles of incorporation. Capital is stated as $15,000. Incorporators are G. E. Herzog, P. Jacobs, A. F. Jacobs and M. Post.

Pocasset Worsted Company, Inc.

Worsted Yarns

Office and Mills Thornton, R. I.

MERION WORSTED MILLS



Sell Direct

Fine French-Spun Worsted and Worsted Merino Yarns

WHITE NATURAL AND FANCY MIXES IN SINGLE AND PLY FOR KNITTING AND WEAVING

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WORSTED YARNS

for Knitting and Weaving Trade

BRIDGEPORT, MONT. CO. PENNA.

FRANKLIN YARN MILLS

Established 1856

Woolen and Merino Yarns

Specialists on Unusual Yarns

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Incorporated

GERMANTOWN, PHILADELPHIA

SAUQUOIT SILK MFG. CO. INSULATING AND BRAIDING SILK

ORGANZINE, TRAM AND HOSIERY SILKS

Fast Dye Organzines for Woolen Manufacturers a Specialty

Mills: Bethlehem, Pa.; Philadelphia, Pa.; Scranton, Pa.; New York Representative, Wm. Ryle & Co., 381 Fourth Ave., Philadelphia Office, 4015 Clarissa St., Nicetown Boston Representative, E. L. Stelle, 52 Chauncy St., Boston

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APRON OILS

The condition of aprons or rub rolls is a matter of the greatest importance

Paragon and Union Apron Oils keep the aprons or rub rolls soft and pliable. They not only tend to increase production, but to make a smooth roving.

BORNE, SCRYMSER COMPANY
Established 1874
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BOSTON PHILADELPHIA
Works: Elizabethport, N. J.

Line at Side Actual Size

You can't blame a moth larva
—for wanting to eat your yarn or fabrics. In its poor deluded mind it thinks it has a right to live.
It MAY have a right to live, but surely not at your expense. Take full precaution against these unwelcome visitors; spray your wool, yarns or fabrics with Murray's Moth Doom.
We guarantee it to rid your mill of these pests. It does its work safely, swiftly and surely. NO RIDDANCE—NO PAY.
HAINSWORTH SUPPLY COMPANY
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EAVENSON & LEVERING CO.
Scouring AND Carbonizing of WOOL AND NOILS
The Standard of Workmanship
Storage and Forwarding
CAMDEN, NEW JERSEY
Philadelphia and Reading Railway Sidings

BRADFORD OILS
For Wool and Reworked Wool
BRADFORD OIL COMPANY Inc.
LYNN, MASS.

AMTEX TRADE MARK REGISTERED
Spinning and Twisting Tapes and Double Loop Bands
AMERICAN TEXTILE BANDING CO., Inc., Germantown, Philadelphia

Philadelphia Wool Scouring and Carbonizing Co.
WOOL
Scoured and Carbonized
Freight Address: Coral St. Sta., P. & R. R. R. Somerset and Trenton Ave., Phila., Pa.

F S
Farnsworth, Stevenson & Co.
Established 1848
WOOL MERCHANTS
Wools and Noils of all descriptions bought and sold on commission
Consignments solicited
268-272 Summer Street, Boston, Mass.

FRANCIS WILLEY & CO., INC.
WOOL MERCHANTS TOP MAKERS
Summer St., BOSTON 10 Chestnut St., PHILADELPHIA
Agents for Francis Willey & Co., Bradford, England

One Girl Can Run Four or Five Warpers

Is this true in *your* warping room, or have you *any* department where so much work is accomplished with so little labor?

Is there any wonder that

ENTWISTLE BEAM WARPERS

cut operating costs to a minimum?

Incidentally — this is about the strongest argument we can think of to prove the simplicity, ease of operation and freedom from trouble of these Warpers.

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Built to meet your individual requirements
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QUICKRUB
METAL POLISH
for Brass, Copper, Nickel, Steel, Aluminum and all other metals capable of taking a polish. Equally good on hot or cold metals.
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WOOL MARKETS

Wool Merchandisers Meeting the Market

Limited Demand Likely for Balance of Year—Re-exports 2.4 Per Cent. of Total Imports

BOSTON.—There is a waiting market on Summer Street, waiting for more business, which is a common situation in textile markets at the present time. Wool merchandisers are meeting the market rather than making it. Manufacturers make the market and such bearishness as they exhibit is the result probably of absence of new business in men's wear fabrics on their books. Replacement of manufacturers' wool stocks will have to take place sooner or later.

Knitters and woolen manufacturers are making the market at the present time but the knitting business while heavy is seasonal and may disappear almost as rapidly as it arose. According to some factors in the market, Summer Street is in for a rather quiet time for the next few weeks, but few look for any recession in values. Wool values, however, are real rather than nominal as was the case earlier in the month.

Wool consumption in August shows a slight increase, 4 per cent.; spinning machinery indicates a decrease in operations quite marked in the worsted branch of the industry where the active spindle hours based upon single shift full capacity shows a decrease of 9 per cent. while woolen spindles decreased 2.5 per cent Wool consumption in the United States for the first eight months of the year totals 447,446,000 pounds of which amount 38 per cent. was domestic wool. First eight months of 1922 consumption was 418,393,000 pounds of which amount 59 per cent. was domestic wools. Consumption of domestic wool in August was 31 per cent. of total which is approximately a normal ratio.

Re-exports of foreign wools continue. A large quantity of B. A. 58's were sold this week, it is said, for export to Bradford. Boston wool re-exports for first nine months of this year and last are as follows:

	1923	1922
Jan.	None	17,000
Feb.	None	None
March	31,000	225,000
April	69,000	None
May	464,000	416,000
June	1,791,000	359,000
July	1,288,000	None
Aug.	2,064,000	583,000
Sept.	526,000	None
	6,233,000 lbs., or 2.4% of total imports of 260,000,000 lbs.	1,600,000 lbs., or .94% of total imports of 171,000,000 lbs.

Receipts and Shipments

Receipts of wool in pounds for the week up to Wednesday follow:

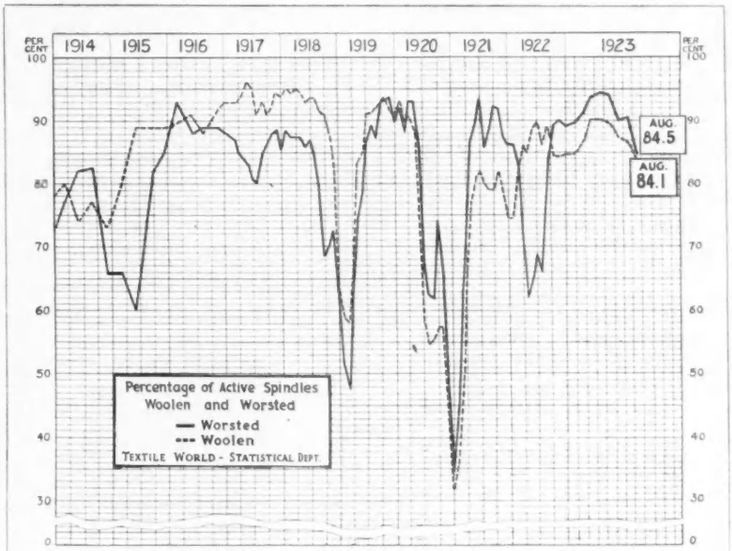
	1923	1922
Domestic	4,374,800	1,363,200
Foreign	241,600	3,031,800
Total	4,616,400	4,395,000

Receipts of wool in pounds since Jan. 1, 1923, compared with the same period in 1922, are as follows:

	1923	1922
Domestic	116,703,200	165,547,355
Foreign	260,111,200	174,502,290
Total	376,814,400	340,049,645

Shipments of wool for the week ending and including Oct. 3 follow:

Boston & Maine	678,000
By sea	1,564,000
Boston & Albany	666,000
New Haven	1,024,000
Total	3,932,000
Shipments during previous week	1,315,000
Shipments same week last year	3,139,000
Shipments thus far for 1923	105,785,000
Shipments similar date 1922	71,490,675



(Chart Showing Active Looms on Page 161)

Domestic Wools Unimproved

Wools Suitable for Knit Goods Trade Lead in Activity

PHILADELPHIA.—There has been no decided improvement in territory and fleece wools. Prices appear to be stabilized at present levels. This is particularly true of low wools, which are the grades in largest demand. Quotations for these wools are fairly well established; no great difficulty arises over price after a manufacturer discovers a dealer having the kind of wool he desires. The largest volume of wool changing hands is going to knitting yarn spinners, with dress goods wools being second in interest.

Sales Reported

Territory wools, scoured basis, are being sold on a basis of 80 to 82c. for quarter-blood, $1 for three-eighths, $1.15 for half-blood and $1.25 and up for fine. Low quarter territory wools are bringing 37 to 38c. in the grease, while braid wools have been sold at prices varying from 33 to 35c. The following sales of wools in the grease were noted: 40,000 pounds quarter-blood territory at 45c.; 50,000 pounds three-eighths fleece at 49 to 50c.; 15,000 pounds half-blood fleece at 52c.; 15,000 pounds 12 months Texas at 50c.; 25,000 pounds fine medium territory at 42½c. and 15,000 pounds quarter-blood territory at 43c. Fine territory has been sold in this market to mills at $1.20 scoured basis; this is said to be exceptionally low, as $1.25 is the lowest price which dealers will consider. Foreign wools of equal quality would cost $1.35 to $1.40 landed. Dealers are not thought to be making any money on the territory and fleece wools now being sold in this market. Prices prevailing at present are lower than they were when the wools were purchased in the West by several cents. Holders in the Middle West are firm in their demands for wools in this market, wanting 50c. for quarter-blood fleeces

Demand for Scoured

Pulled and scoured wools are in better demand; low scoured wools are reported to be more active than the finer grades. A lot of 48s clothing types, New Zealand sold at 65 to 70c. In pulled wools B Lambs are in good demand, with prices in sales reported ranging from 83 to 85c., with smaller lots sold as high as 87c.

Quotations

(Corrected at close of business Wednesday)

Ohio, Pennsylvania and West Virginia

Fine cloth'g..49—50	⅜ blood .....52—53
Fine delaine..53—54	¼ blood .....47—49
½ blood .....—54	

Michigan and New York

Fine delaine..50—51	½ blood .....52—53
Fine cloth'g..47—48	¼ to ⅜bl'd..49—52

Indiana, Missouri and Similar

½ blood .....51—52	¼ blood .....46—47
⅜ blood .....50—51	Common .....36—38

California
(Scoured Basis.)

Northern	Southern
12mo ...1.25&1.28	12mo ...1.15—1.20
Sp'g middle counties 1.10—1.15	Fall free..1.00—1.05
	Fall defects.95—1.00
	Carbonized.1.00—1.10

Texas
(Scoured Basis.)

Fine 12mo.1.25—1.28	Fine fall...1.00—1.05
Fine 8mo..1.15—1.20	

Pulled—Eastern
(Scoured)

Fine .....1.25—1.28	Lambs Bs..83— .85
A Super...1.15—1.20	C'bgs fine.1.10—1.15
B Super... .85— .90	Medium .. .90— .95
C Super... .70— .75	Coarse .... .70— .75

Montana, Idaho and Wyoming
(Scoured Basis.)

Staple fine..1.28—1.30	Fine & fine med.
Do. ½ bld.1.20—1.25	clothing 1.15—1.25

Utah
(Scoured Basis.)

Fine .....1.25—1.28	Fine mdm.1.23—1.25

Colorado and New Mexico
(Scoured Basis.)

Fine .....1.23—1.25	½ blood...1.20—1.25

Nevada
(Scoured Basis.)

Fine mdm.1.23—1.25	Fine clthg.1.20—1.23

Mohair

Domestic	Foreign (In Bond)
Best combing.79—83	Turkey .....40—45
Best carding.70—75	Cape .....35—40

Foreign Clothing and Combing
(In Bond.)

Clean Basis	In Grease
Cape:	Montevideo:
Combing, choice 1.12—1.15	56-58s .....45—48
Combing, good ..1.08—1.10	56s .....43—45
Clothing, choice. .90— .95	50s .....38—40
good .. .85— .90	Buenos Aires:
Australian:	40s .....22—24
70s ....1.17—1.20	46s .....26—29
64s ....1.12—1.15	
56-58s .. .88— .90	

Foreign Carpet
(Grease Basis—In Bond.)

Aleppo:	Khorassan:
Wash .....29—31	2nd clip ...25—27
Angora ....14—16	1st clip ...27—29
Awassi:	Mongolian:
Washed ...27—29	Urga .....24—26
Karadi:	Manchu'n ..17—20
Washed ...27—29	Scotch Black
China:	Face .....21—22
Combing ...22—23	Camel's Hair
No. 1 Wld ball .....49—54	(Russian) ...—..
Wld. filling...20—21	Servian skin
Szechuen assortm't..16—17	wool .....25—28
	East India:
	Kandahar ..31—34
	Vickan'r ...31—36
Cordova .....19—20	Joria .....35—39

Phila. Wool Trade Note

Hugh T. Smith & Co., wool dealers, have moved their offices from 126 Chestnut street to 121 S. Front street, where they will occupy the entire building after alterations are complete.

More Wool Sales

Some Buyers in Market Looking for Particular Grades

CHICAGO.—Some original Wisconsin fleece wools have been sold at 40c. flat f. o. b. shipping point. A fair sized lot of shorn lambs' wool is offered at 37c. Some B wools have been sold to manufacturers in price ranging from 75c. to 85c. according to quality. There is a report originating in the Stock Yards of a B wool sale at 88c.

A representative of a large eastern manufacturer was in this market during the week looking for one-quarter blood fleeces and lower grades.

Does Oiling Help or Hurt Your Wool?

The answer in many cases depends on the oil used. As surely as poor quality oil causes stains and blotches, the right oil benefits the fabrics, and speeds up production, by effecting smoother running on the machines.

Over fifty years ago, a number of woolen manufacturers found out that Scotch Wool Oil was the right oil. Many years of use have merely served to strengthen the original opinion of these mill men, and the list of regular users has grown steadily.

Scotch Wool Oil helps the wool by keeping it in a satisfactory condition, and enabling it to run more quickly through the cards and other machines.

Its use keeps fabrics from the injuries so often caused by inferior oils. Scotch Wool Oil does not stain or blotch the goods or create a chemical compound harmful to machines. Stock treated with this oil will not become sticky after storing.

Scotch Wool Oil can be washed out easily with less soap than is needed to wash out any other wool oil on the market. And Scotch oil runs absolutely smoothly!

"Lubrik" Textile Lubricant is another product of unusual merit. It, as well as Scotch Wool Oil, deserves at least a trial order in your mill.

MASURY-YOUNG CO., Boston, Mass.
"Our Success Represents Confidence Won by Integrity"

SCOTCH WOOL OIL

C. S. DODGE *for*

The Dodge Picker
Dodge Wool-Bagging Machine
Dodge Cylinder Grinder
Dodge Patent Hot Forged Picker Pins
High Carbon Steel Wire

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Established 1883
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Two Recent Books

The Carbonizing Process, by J. Dumville and S. Kershaw.....$2.00

Deals in a comprehensive manner with the origin and characteristics of the most important vegetable impurities which become entangled in wool and describes the latest British practice in effecting their elimination. Chemical processes and machinery employed are fully treated. Paper cover; 83 Pages; 18 Illustrations.

Wool Substitutes, by Roberts Beaumont $3.00

Covers the entire range of the subject, including sorting, grading, grinding, carbonizing, blending, yarn preparation and cloth manufacture. Chapters on artificial wools, noils and flocks. Cloth; 204 Pages; 53 Illustrations.

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Rags, Substitutes and Waste

Worsted Wastes Are Coming Along Slowly

Better Market for White and Colored Threads—Carded Substitutes in Fair Demand

BOSTON.—The recovered wool industry is doing better. Some of the larger plants are loaded down with business, it is said. Two or three well-known concerns in the West and North are working night and day on carded materials. Business seems unequally distributed.

From time to time the project for consolidation of a number of small plants comes up for consideration, but according to well-informed individuals the only kind of consolidation possible would be for some person to purchase these plants, scrap some machinery, reduce the overhead considerably, and run the resulting organization as a single concern.

While the larger organizations are running full time, smaller manufacturers who are not so advantageously placed are inclined to cut prices in order to obtain a larger share of the business available. The tendency in this industry is unquestionably toward larger organizations, well financed and able to buy materials on low markets. The rag market on the other hand is split up into a multitude of conflicting elements particularly in graded materials although packings are controlled more extensively by a few large houses.

The graded rag market is firmer, knit softs are higher. This stuff does not please the grading section altogether as they would naturally enough like to purchase their softs at a low figure and sell their graded materials at a high figure. Some good mill buying is going on in polo cloth, blue serge, red knits and coarse light merino. Blue serge and red knits are subjected to stripping operations and the resultant products are quite light-colored and capable of being re-dyed to desirable shades.

The mill waste market shows increasing activity. Dealers are already beginning to notice the effect of depleted stocks. Said an important merchandiser, "The worsted mills are not sending us anything; mills that used to ship 150 bags a month are not sending in a third of that quantity, and other mills whose average production would be 50-60 bags a month are shipping in from 8-10 bags only." This apparent shortage of worsted wastes, should the woolen mill demand continue, will inevitably lift prices to higher levels.

Colored worsted wastes of the better sorts are becoming scarcer every day. The worsted branch of wool manufacturing is losing ground and there seems little in sight to bring about any marked improvement in this direction before the next heavyweight opening at the first of the year. Mill demand for these commodities is good and with a limited supply an upward trend in price seems probable.

Quotations

(Corrected at close of business Wednesday)

Wool Waste

Lap—	
Fine White	$1.23—$1.28
Fine Colored	.98— 1.03
Medium Colored	.58— .60
Ring—	
Fine Australian	1.20— 1.23
Fine Domestic	1.15— 1.18
Thread White Worsted—	
Fine	.88— .90
½ Blood	.78— .80
⅜ Blood	.62— .67
¼ Blood	.49— .53
Low	.38— .43
Thread Colored Worsted—	
Fine	.38— .45
½ Blood	.35— .38
⅜ Blood	.30— .35
¼ Blood	.28— .30
Low	.25— .28
Carpet	.16— .18
Card—	
Fine White	.50— .60
Medium White	.33— .38
Fine Colored	.15— .20
Medium Colored	.08— .10

Reworked Wool

	Cents per lb.
Serges—	
Blue	20—21
Brown	26—27
Green	29—30
Red	31—32
Black	19—20
Knits—	
White	57—58
Red	39—40
Brown	37—38
Merinos—	
Fine light	37—38
Fine dark	21—22
Coarse light	21—22
Worsted Skirted—	
Light	23—24
Blue	21—22
Dark	15—16
Brown	21—22

Men's Wear Clips

Worsteds—	
Dark	17—18
Light	23—24
Black and white	28—29
Brown	28—29
Blue	33—34
Black	25—28

Flannels

Blue	15—16
Black	15—16
Green	17—18
Light	19—20
Tan	22—24
Scarlet	22—24

Women's Wear Clips

Serges—	
White	50—55
Blue	24—25
Black	27—28
Brown	30—32
Green	30—31
Light	25—26
Tan	30—31

Old Woolen Rags

Merinos—	
Coarse light	7 — 8
Fine light	19 —21
Coarse dark	2½— 3
Fine dark	6 — 7
Serges—	
Light	12 —14
Brown	13 —14
Blue	6 — 6½
Black	6 — 6½
Red	12 —13
Green	11 —12
Knit—	
White	35 —40
Black	17 —18
Red	20 —21
Brown	18 —19
Light	23 —24

Skirted Cloths

Skirted Worsteds—	
Light	7 — 8
Black	7 — 8
Blue	6 — 7
Dark	3 — 4

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From year to year, hundreds of new names are added to the list of LOGEMANN baling-press users in the textile field.

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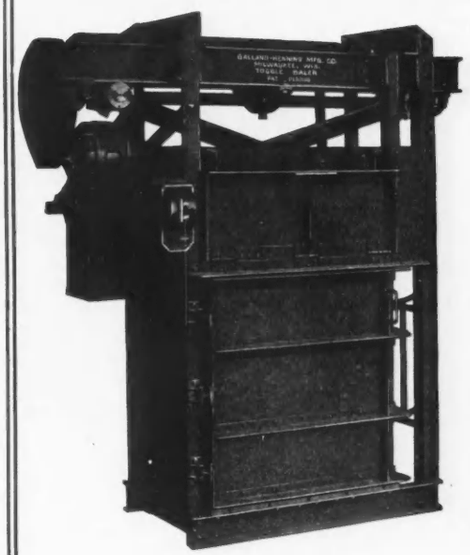

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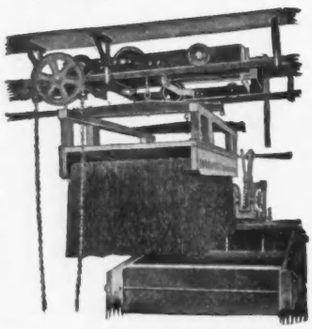

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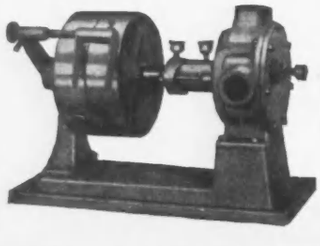

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DYESTUFFS AND CHEMICALS

Revisions Still Noted in Dyes

Although Business Is Improving, Competition Is Keen and Concessions Often Possible

Despite the fact that fall improvement in dye sales has set in and continued increase in volume is expected from now on, competition in the industry seems to be unusually keen. Concessions naturally follow from this competition, and the general price trend is still slightly downward. Many of the quotations heard must be flirting perilously near cost basis.

In the direct cotton dyes, the outside price on Benzo azurine is now approximately 90c., making the range 80 to 90c. Brown M has recently registered a decline of 10c. in many quarters and is priced at 70 to 90c. The reds are also at lower levels than previously, the Congo ranging from 45 to 70c. and Benzo Purpurine 4B from 45 to 90c. Solamine Blue, on the other hand, seems to be held more firmly, the price heard being in the neighborhood of $2.

In the basic dyes, Malachite Green is in a strong position and the quotations range from $1.70 to $2.25.

Acid Colors

In the acid colors, the outside price is 10c. lower, the range now being 60 to 80c. Alizarine Saphirol is also weaker on the outside, being quoted from $3.50 to $4. Sulphocyanine ranges from 85c. to $1.

In the intermediates, aniline oil is firmer, ranging from 16 to 17½c. per lb. Beta naphthol, technical, has also shown a stronger tendency.

Dye Imports

Imports of dyes into the United States during July, 1923, included 15,156 lbs. of alizarine and alizarine dyes valued at $23,762; 2,913 lbs. of natural indigo valued at $1,114; 382,466 lbs. of extracts and decoctions for dyeing valued at $23,470; and 160,940 lbs. of other dyes and stains valued at $236,777. Germany was the largest source of the latter class, Switzerland second, Italy third.

F. S. Dickson Resigns

WASHINGTON, D. C.—F. S. Dickson, assistant to Dr. Charles H. Herty, president of the Synthetic Organic Chemical Manufacturers Association, announced in Washington on Sept. 29 that he had tendered his resignation. Mr. Dickson has been connected with the organization for the last six months. Formerly he was chief of the dye and chemical control branch of the State Department and prior to that affiliated with the War Trade Board.

Miscellaneous Chemicals

Acetone	25	—	26
Alumina-Sulphate Com.	1½	—	1¾
Iron Free	2¼	—	2½
Alum. Ammonia Lump	3½	—	3¾
Potash, Lump	3	—	4
Ammoniac, Sal. white, gr.	6½	—	8
Bleach powder, per 100 lb.	1 50	—	1 75
Blue Stone	4¾	—	5¼
Calcium Arsenate	12	—	14
Chlorine Gas, Liquid	5	—	6
Copperas, ton	18 00	—25	00
Cream of tartar, tech.	25	—	26
Epsom Salts, Tech., 100 lb.	1 10	—	1 75
Formaldehyde, Spot	12	—	13
Glauber Salts, 100 lb.	75	—	1 45
Glycerine (C. P.) bbls., dms., extra	17	—	17½
Cans	18½	—	19
Distilled, yellow, crude	16	—	16½
Lead—Brown acetate	13	—	13½
White (crystals)	14	—	14½
Lime, acetate, 100 lb.	4 00	—	..
Potassium—Bichromate	9½	—	10
Chlorate crystals	7½	—	9
Permanganate, tech.	17	—	18
Sodium acetate	5	—	6
Bichromate	7½	—	8
Bisulphite, 35%	1½	—	..
Nitrite	7¼	—	8
Phosphate (Commercial)	3½	—	4
Prussiate, yellow	14	—	14½
Sulphide, 60%, fused	3	—	4¾
30% crystals	2¼	—	2½
Tartar emetic, tech.	28	—	30
Tin—Crystals	31½	—	32
Bichloride, 50 deg.	12	—	12½
Oxide, lbs.	47	—	49
Zinc Dust	10	—	11

Acids

Acetic, 28% per 100 lb.	3 38	—	3 63
Citric crystals	49	—	50
Formic, 85%	12	—	16
Lactic, 22%	4½	—	6½
Muriatic, 18 deg. per 100 lb., in tank cars	90	—	1 00
Nitric, 36 @ 42 deg. per 100 lb.	4 50	—	6 00
Oxalic	12	—	12½
Sulphuric, 66 deg. per ton, in tank cars	15 00	—16	00
Tartaric	32	—	33

Alkalies

Ammonia, aqua, 26 deg.	7	—	7½
Borax, refined, crystals and powdered, bbls.	5½	—	6½
Potash, carbonate, 80-85%	6	—	7
Caustic, 70-75%	9	—	10
Soda Ash, 58% light, per 100 lb. bags	1 75	—	2 10
Bicarbonate, per 100 lb.	2 00	—	2 25
Caustic, 75%, per 100 lb.	3 26	—	3 75
Sal., 100 lb.	1 15	—	1 25

Natural Dyes and Tannins

Fustic: Solid	14	—	15
Liquid, 51 deg.	10	—	12
Gambier, liquid	8½	—	10
Hematine, Crystals	14	—	20
Hypernic Ext.—51 deg., red shade	9½	—	10½
Indigo—Madras	85	—	90
Logwood chips	2½	—	3½
Extract, liquid, 51 deg.	7	—	8
Crystals	14	—	16
Osage Orange, Extract, 51 degs.	7	—	7½
Osage Orange, crystals	16	—	17
Quercitron, Extract, 51 degs.	6½	—	7½
Sumac, Ext. dom., ref. 51 degs.	6½	—	7
Extract, stainless	8½	—	9
Tannic acid, technical	40	—	45

Dyestuff Intermediates

Alpha Naphthol, ref.	65	—	90
Crude	60	—	80
Alpha Naphthylamine	35	—	37
Aniline oil	16	—	17½
Salt	23	—	25
Beta Naphthol, sublimed	55	—	60
Technical	21	—	23
Dimethylaniline	41	—	43
Metaphenylene Diamine	90	—	1 00
Paranitraniline	70	—	75

Oils and Soaps

Castor Oil, No. 3	13	—	14
Lard oil, extra winter strained, 100 lb.	13 75	—	
Extra No. 1, 100 lb.	11 50	—	
No. 1, 100 lb.	11 00	—	
Olive oil, denatured, gal.	1 15	—	..
Foots	8½	—	9
Red oil, lb.	9½	—	..
Stearic Acid, single pressed	12½	—	..
Turkey Red Oil, 50%	9	—	12

Adhesive and Sizing Materials

Albumin, blood domestic	45	—	55
Egg, technical	95	—	1 00
Dextrine—Potato	7½	—	8
Corn, carload lots, bags, 100 lb.	3 84	—	3 89
Do., bbls., 100 lb.	4 11	—	4 16
Gum arabic, amber sorts	13½	—	14
Gum, British, carload lots, bags, 100 lb.	4 19	—	..
Do., bbls., 100 lb.	4 46	—	..
Sago, flour	3½	—	4
Starch, corn, bags, carload, 100 lb.	3 32	—	3 42
Do., bbls.	3 59	—	3 69
Corn, thin boiling, bags, 100 lb.	4 07	—	4 17
Do., bbls	4 34	—	4 44
Potato	4½	—	5½
Rice	9	—	12
Wheat	6	—	7
Tapioca flour	5½	—	6

Coal Tar Dyes

Direct Colors—			
Black (H-acid)	35	—	40
Black, Columbia FF.	80	—	1 00
Blue, 2 B.	29	—	45
Blue, 3 B.	50	—	75
Blue, sky, ordinary	80	—	1 15
Blue, sky, FF.	1 15	—	2 30
Blue, Fast RL.	1 90	—	..
Blue, Solamine	2 00	—	..
Benzo Azurine	80	—	90
Brown C	40	—	70
Brown M	70	—	90
Brown, Congo G.	90	—	..
Brown, Congo R.	85	—	..
Green B	90	—	1 10
Green G	90	—	1 10
Orange, Congo	80	—	..
Orange, Fast S.	1 95	—	..
Red, Fast F.	90	—	1 10
Red, Congo	45	—	70
Red, Benzo Purpurine 4B	45	—	90
Red, Benzo, Purpurine 10B	2 00	—	..
Scarlet, 4 BA.	1 50	—	..
Scarlet, 4 BS.	2 50	—	..
Scarlet, 8 BS.	2 15	—	..
Scarlet, Diamine B.	1 65	—	..
Violet N	1 10	—	1 40
Yellow, Chloramine	1 00	—	2 00
Yellow, Chrysamine	90	—	1 25
Yellow, Crysophenine	80	—	2 50
Yellow, Stilbene	90	—	1 25
Developing Colors—			
Black, B. H.	75	—	1 10
Black, Zambesi	3 50	—	..
Orange, developed	2 50	—	..
Primuline	1 00	—	1 15
Scarlet, Developed A	2 50	—	..
Scarlet, Developed R	3 00	—	..
Diazo Bordeaux 7B.	2 00	—	..
Sulphur Colors—			
Black	15	—	30
Blue, cadet	80	—	95
Blue, navy	50	—	90
Brown	25	—	60
Green	85	—	1 25
Green, olive	55	—	80
Yellow	45	—	1 80
Basic Colors—			
Auramine	1 50	—	2 50
Bismarck Brown	60	—	75
Chrysoidine	65	—	80
Fuchsine crystals	2 25	—	2 75
Malachite green	1 70	—	2 25
Methylene blue	1 65	—	2 00
Methyl violet	1 50	—	1 60
Rhodamine B, ex. conc.	8 00	—	..
Rhodamine 6G	12 00	—18	00
Safranine	1 60	—	2 00
Victoria Blue B.	2 00	—	3 00
Acid Colors—			
Napthol blue black	60	—	80
Naphthylamine black 4B	50	—	75
Sulphon black A.	1 10	—	..
Alizarine saphirol	3 50	—	4 00
Alkali Blue	3 50	—	4 50
Indigotine	1 75	—	2 50
Induline (water soluble)	75	—	85
Soluble Blue	2 75	—	3 50
Sulphocyanine	85	—	1 00
Sulphon Blue R.	70	—	90
Patent Blue A.	2 85	—	..
Resorcin brown	85	—	95
Guinea green	1 00	—	2 20
Wool green S.	65	—	2 30
Orange II	29	—	33
Orange GG (crystals)	60	—	..
Acid fuchsine	75	—	..
Amaranth	50	—	..
Azo Bordeaux	75	—	1 00
Azo eosine G.	1 25	—	2 25
Brilliant scarlet	85	—	95
Crocein scarlet	1 10	—	1 35
Fast red A.	60	—	70
Azo yellow	1 10	—	1 40
Fast Light Yellow 2G	2 00	—	..
Fast Light Yellow 3G	2 75	—	..
Naphthol Yellow	1 35	—	1 40
Metanil Yellow	80	—	1 10
Indigo—			
Synthetic, 20% paste	26	—	26½

Corn Products Lower By 10c. Per 100 Lb.

Price Movements in Rest of Market Are Restricted—Alkali Strength Maintained

Price movements in industrial chemicals are restricted and operations continue in routine manner.

Advances of 20c. per 100 lb. have been made on corn products, bringing corn starch to $3.32 to $3.42 per 100 lb. in bags, carload lots, and $3.59 to $3.69 in barrels; corn starch, thin boiling, $4.07 to $4.17 in bags and $4.34 to $4.44 in barrels. Corn dextrine, $3.84 to $3.89 in bags and $4.11 to $4.16 in barrels; British gum, $4.19 in bags and $4.46 in barrels.

Minor price changes include strengthening in permanganate of potash to a range of 17 to 18c. per lb.; and in yellow prussiate of soda to a range of 14 to 14½c. per lb.

In the oils, lard oil extra No. 1 is quoted at $11.50 per 100 lb. and the No. 1 at $11.00, both registering a decline of 50c. per 100 lb. Red oil is fractionally easier at 9½c. per lb.; as is stearic acid, single pressed, at 12½c. per lb.

The alkalies are steady, contract prices for 1924 having been announced as previously noted, and contract withdrawals being well maintained.

Announces Lower Price on Bleach

Mathieson Company Places Last Quarter's Figures at $1.65, but Looks for Higher Trend

Of particular market interest to the textile industry is the following letter which the Mathieson Alkali Works, Inc., New York, mailed last week to all its customers with whom it has quarterly contracts for bleaching powder, carload lots in standard drums:

"A sincere effort to consider thoroughly the changes in the present bleaching powder market, has delayed the announcement of prices to apply on the last quarter of your contract until the present moment.

"It is our opinion that the unreduced cost of manufacture of this commodity, together with the well known effect of cool weather are already having their effect on the market situation and that the general trend for the rest of the year will be towards the prices applying for the first half of 1923.

"However, some recognition of the disturbances must be made by us to our contracted customers and for that reason a further reduction from last quarter's price to a figure of $1.65

Modernizing Profits

The same reasoning that leads one to modernize the mechanical equipment of his mill, also suggests the use of

Wyandotte Textile Soda

Wyandotte Concentrated Ash

Wyandotte Kier Boiling Special

They, too, are modern, modern in that they produce results readily distinguishable from those produced by the use of ordinary alkalies, results that find for your products a more ready market, and at a better profit.

Are not such assurances in the use of the Wyandotte Special Alkalies well worth your thoughtful consideration.

THIS TRADE MARK

IN EVERY PACKAGE

Sold through supply houses

THE J. B. FORD CO.
Sole Manufacturers
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Established 1870

JOHN HEATHCOTE & SON, INC.
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For Woolens, Worsteds, Felts, Etc.

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TWENTIETH CENTURY

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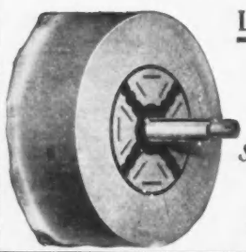
Rolls for Textile Dyeing, Washing, and Bleaching Machinery, Carbonizers, Conveying Equipments, and Paper Mill Machinery



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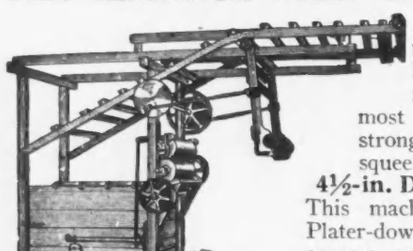

Special attention is called to this improved **Warp Dyeing Machine.** This machine is built in the most substantial manner, being strongly geared with good, heavy squeeze rolls, and having **Seven 4½-in. Diameter Brass Rolls.** This machine, with our improved Plater-down has met with marvelous success, and parties desiring machinery of this class can make no mistake on ours. For further particulars and prices, address

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STURDY SIMPLICITY
MAKE IT YOUR BUY WORD

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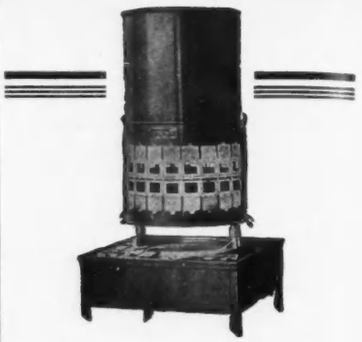

"We haven't time to test this"

—is a dangerous thing to say. There are mighty few rush orders worth risking the dissatisfaction caused by quickly fading colors.

The Fade-Ometer tests dye colors accurately and *quickly*—at any time of day or night. 40 tests can be carried out at once in one-eighth the time required by the out-of-date and unreliable sun-method.

May we send you our bulletin No. 60 "Colors Fast or Fugitive?"

The Fade-Ometer does not use any form of Mercury Arc, Quartz Tube, or Ultra-Violet Light

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NEW YORK, F. Schlayer, 25 Howard St.
LONDON, A. D. Lang, Ltd., 42 Berners St. Oxford St. W-1

The FADE-OMETER

When installing a machine for Carbonizing, Dyeing, Bleaching, Drying or Finishing be sure you are buying a

Berry Wheel or Fan
with no back draught
Applicable to any make of Dryer
Used by the leading textile mills
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FILTERS

VALVES · CAUSTIC POTS · CASTINGS
Chemical Engineering and Foundry Company
ATLANTA GEORGIA
Engineers-Founders-Machinists

per 100 lbs. is announced herewith as applying to deliveries during the last quarter of the year."

Further Statement

The company amplifies the above letter in the following statement to TEXTILE WORLD:

"It will also be the company's policy to modify to this figure all contracts for carload quantities in standard drums which have been taken without the usual quarterly revision clause.

"The company also recognizes, and does not refrain from publicly stating, that some large contracts for liquid chlorine in tank car quantities are still being negotiated for periods of 12 months, at 4c. per pound, F. O. B. factory.

"With regard to the price which would apply on either bleaching powder or liquid chlorine for contracts for delivery over 1924, the company wishes to state that observation of the market situation for a further period will be necessary before definite figures can be announced.

"It is to be hoped that bleaching powder will move to a point where there is some margin of profit in its sale and that the price on liquid chlorine will correspondingly strengthen."

Dye and Chemical Notes

E. I. du Pont de Nemours & Co., Inc., announce a new direct color, Pontamine Fast Blue S. L. The company states: "This is of particular importance on account of its excellent resistance to light. In addition to being suitable for cotton, the product is adapted for paper on account of its excellent fastness to light. It does not require aftertreatment, as this method does not give any increase in fastness to light, and only slightly increases its fastness to washing."

Plans for the 1925 Chemical Exposition were already under way. At a recent meeting of exhibitors, the advisory committee and management, the week of Sept. 28 to Oct. 3, 1925, and the Grand Central Palace, New York, were the time and place finally decided upon. Announcement was made at the close of this year's exposition that over 75% of space on the first floor had already been contracted for in the 1925 exposition by present exhibitors. Broad changes and new development for 1925 are already being considered in the formulation of early plans.

The McGregor Chemical Co., 6309 Yale avenue, Chicago, Ill., has been incorporated. The incorporators are G. A. Schmalbach, O. A. Knittel and P. D. Buchheit.

The United Aniline Co., Inc., Boston, Mass., has recently been incorporated with a capital of 1,000 shares of stock no par value. Louis Aronson, 1722 Commonwealth avenue, is president and treasurer.

The Southern Chemical Laboratories, Fort Worth, Texas, has been organized. The company is headed by Sidney J. Wilson and J. G. Gotch, both of Fort Worth.

The new plant of C. H. Boley Co., Inc., manufacturing industrial chemists, 3726-28 N. Randolph St., Philadelphia, has been completed. This is fully modernly equipped, and capacity has been doubled. It includes a research and experimental laboratory.

Foundation Files Brief

Denies Conspiracy Charge in Patent Case

The brief of the defense in the suit of the U. S. Government against the Chemical Foundation, Inc., for the return of German chemical and dye patents has been filed in the U. S. District Court at Wilmington, Del. The Government's brief was filed previously and argument will begin on Monday of next week.

The Foundation's brief reviews the testimony at the trial and claims that the record does not show that President Wilson was deceived in connection with the sale of the patents to the Foundation but that on the contrary he had been given complete facts and acted with full knowledge of the matter.

It also claims that the record controverts any charge of conspiracy or monopoly in the dye industry and attacks Herman A. Metz as "an untruthful and deceitful witness."

The brief, which is a lengthy one, states that the trial has wrought great harm to the defendant and asks for a complete and unqualified vindication.

Electrical Yarn Committee

Interest Shown in Development of Specifications

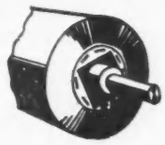
Considerable interest has been aroused in the work of developing of standard specifications for electrical cotton yarn, as noted in a previous issue of TEXTILE WORLD. Those who have been active in this matter are anxious to have as many users and producers employ the tentative test methods during the coming year so that Committee D-13 may have the benefit of any criticisms or suggestions which may occur.

The original committee which considered this matter was made up of the following members:

Selling: James Austin, New York; P. S. Jamieson, Multiple Winding Co., Boston; L. B. Malone, Catlin & Co., New York; H. M. Remington, Philadelphia; Reginald Reynolds, Harding, Tilton & Co., New York.

Buying: C. J. Schnelle (Chairman), The Acme Wire Co., New Haven, Conn.; Dean Harvey, Westinghouse Elec. & Mfg. Co., East Pittsburgh, Pa.; J. A. Capp and Mr. Moore, General Electric Co., Schenectady, N. Y.; C. F. Hood, American Steel & Wire Co., Electric Cable Works, Worcester, Mass.; Dr. R. W. Langley, Acme Wire Co., New Haven, Conn.; W. D. A. Peaslee, Chief Engineer, Belden Mfg. Co., Chicago.

Others: J. L. Alden, American Insulating Machinery Co., Philadelphia; K. B. Cook, (Representative American Society for Testing Materials), United States Rubber Co., Newark, N. J.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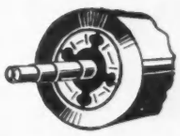
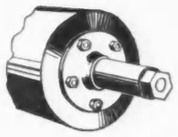
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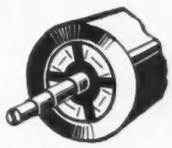
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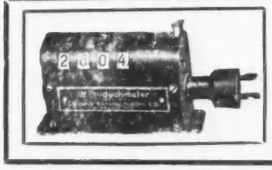

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Drygoodsman
Dry Goods Reporter

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Electrical Merchandising
Electrical Record
Electrical World
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